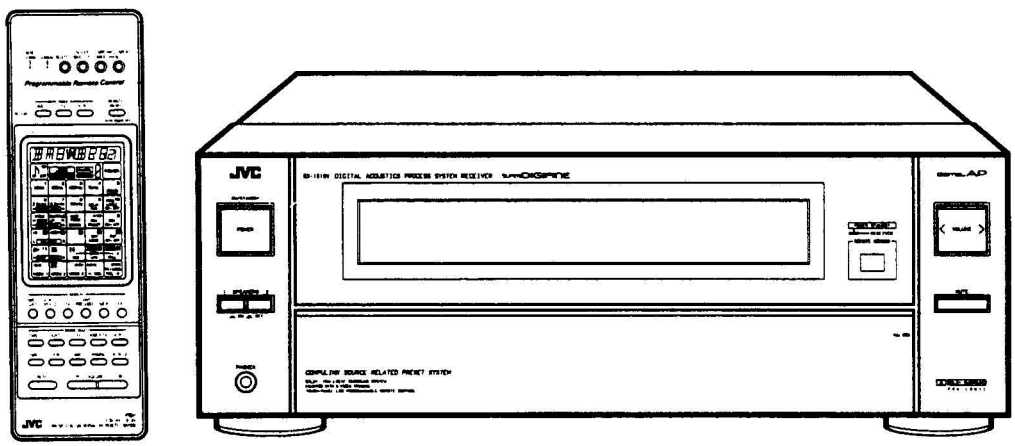
JVC

DIGITAL ACOUSTICS PROCESS SYSTEM RECEIVER

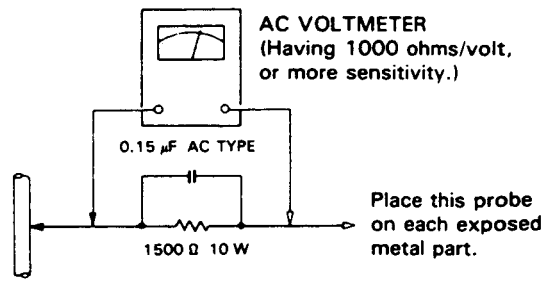
MODEL No. RX-1010VTN



Jul. 1989

Safety Precautions

1. The design of this product contains special hardware and may circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

SPECIFICATIONS

AMPLIFIER SECTION

Output power.
(CD IN → SP.OUT)

2-Channel operation :

<For the U.S.A.>
120 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.
130 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.2% total harmonic distortion.
125 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003%** total harmonic distortion.
<For the U.K.>
120 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.
120 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz (DIN)
120 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003%** total harmonic distortion.

4-Channel Operation

Front Channels : **110 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007 % total harmonic distortion**
110 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz (DIN)

Rear Channel : 15 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz, with no more than 0.07%** total harmonic distortion.

Total harmonic distortion : 0.003 %** at 120 watts (1 kHz, 8 ohms)

Inter modulation distortion : 0.007 % at 120 watts

Damping factor : 45 at 8 ohms, 1 kHz

Input sensitivity/impedance

PHONO (MM)	:	2.5mV/47k ohms
PHONO (MC)	:	250μV/100 ohms
TAPE 1 PLAY, TAPE 2 PLAY, DAT PLAY, CD, VIDEO, VCR 1 PLAY, VCR 2 PLAY	:	230 mV/47k ohms

Recording output level : 230mV

Frequency response

PHONO (RIAA equalization)	:	20 Hz — 20 kHz, ±0.5 dB
TAPE 1 PLAY, TAPE 2, PLAY, DAT PLAY CD, VIDEO, VCR 1 PLAY VCR 2 PLAY	:	5 Hz — 20 kHz, +0 dB, −1 dB

S.E.A. graphic equalizer

Center frequencies	:	63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz
Control range	:	±10 dB

Signal-to-noise ratio

PHONO (MM)	:	80 dB ('66 IHF) 80 dB ('78 IHF, REC OUT) 66 dB (DIN)
TAPE 1 PLAY, TAPE 2 PLAY, DAT PLAY, CD, VIDEO, VCR 1 PLAY, VCR 2 PLAY	:	100 dB ('66 IHF) 85 dB ('78 IHF) 67 dB (DIN)

FM TUNER SECTION

		IHF	DIN
Tuning range	:	87.5 MHz — 108.0 MHz	87.5 MHz — 108.0 MHz
Usable sensitivity	:	Mono 10.8 dBf (0.95μV/75 ohms, 1.9μV/300 ohms)	—
26 dB quieting sensitivitys	:	—	1.5 μV/75 ohms 3 μV/300 ohm
50 dB quieting sensitivity	:	Mono 16.3 dBf (1.8 μV/75 ohms, 3.6 μV/300 ohms)	—
		Stereo 38.3 dBf (22.5 μV/75 ohms, 45μV/300 ohms)	—
S/N 46 dB stereo sensitivity	:	—	23 μV/75 ohms
Signal-to-noise ratio (at 85 dBf)	:	Mono 81 dB Stereo 73 dB (IHF-A net, 85 dBf)	Mono 72 dB Streo 64 dB
Total harmonic distortion (1 kHz)	:	Mono 0.15 % Stereo 0.2 %	Mono 0.1 % Stereo 0.3 %
Frequency response	:	30 Hz — 15 kHz , +0.5 dB, −3 dB	
Capture ratio (85 dBf)	:	1.5 dB	—
Alternate channel selectivity	:	65 dB ± 400 kHz	55 dB ± 300 kHz
Image response ratio	:	80 dB (at 98 MHz)	
IF response ratio	:	85 dB (at 98 MHz)	
Stereo separation	:	40 dB at 1 kHz	40 dB at 1 kHz

AM TUNER SECTION

Tuning range	:	530 kHz — 1,710 kHz (For the U.S.A) 522 kHz — 1,629 kHz (For the U.K)
Sensitivity		
Loop antenna	:	300 μV/m*
External antenna	:	30 μV*
Signal-to-noise ratio (100 mV/m)	:	50 dB*
Selectivity	:	38 dB* ±10 kHz 35 dB* ± 9 kHz
Image response ratio	:	40 dB*
IF response ratio	:	60 dB
Total harmonic distortion (100 mV/m)	:	0.5%*

VIDEO SECTION

Output signal level : VCR 1 REC VCR 2 REC MONITOR OUT A, B		1 Vp-p (1 Vp-p input)
Impedance	:	75 ohms unbalanced
Synchronization	:	Negative
Signal-to-noise ratio	:	45 dB
Crosstalk	:	45 dB (3.58 MHz)

GENERAL

Power requirements	:	AC 120V~, 60 Hz (For the U.S.A.) AC 240V~, 50 Hz (For the U.K.)
Power Consumption	:	780 watts, 925 VA (For the U.S.A.) 910 watts (For the U.K.)
Dimensions (W × H × D)	:	17-3/16" × 6-3/16" × 15-1/2" inches (435 × 156 × 393 mm)
Weight	:	27.6 lbs. (12.5 kg)

* Measured at 1,000 kHz or 999 kHz
** Measured by JVC Audio Analysis System.

Design and specifications subject to change without notice.

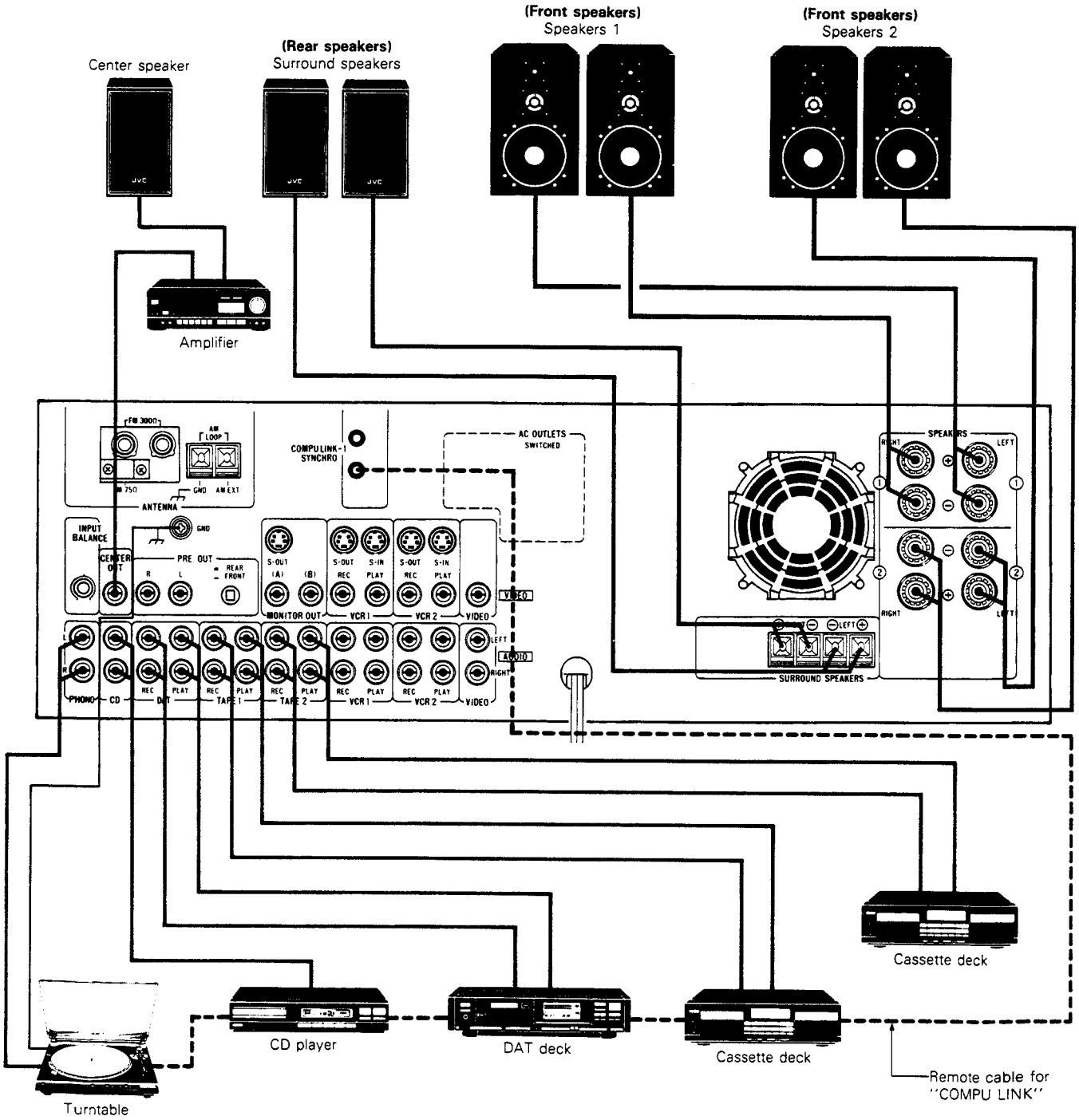
POWER SPECIFICATIONS

Area [redacted]	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120V ∿, 60Hz	780 watts, 925VA
Canada		
Continental Europe	AC 220V ∿, 50 Hz	390 watts
U.K.	AC 240V ∿, 50 Hz	910 watts
Australia		
Other Area	AC 110/120/220/240 V ∿, 50/60 Hz	390 watts

CONNECTION DIAGRAM

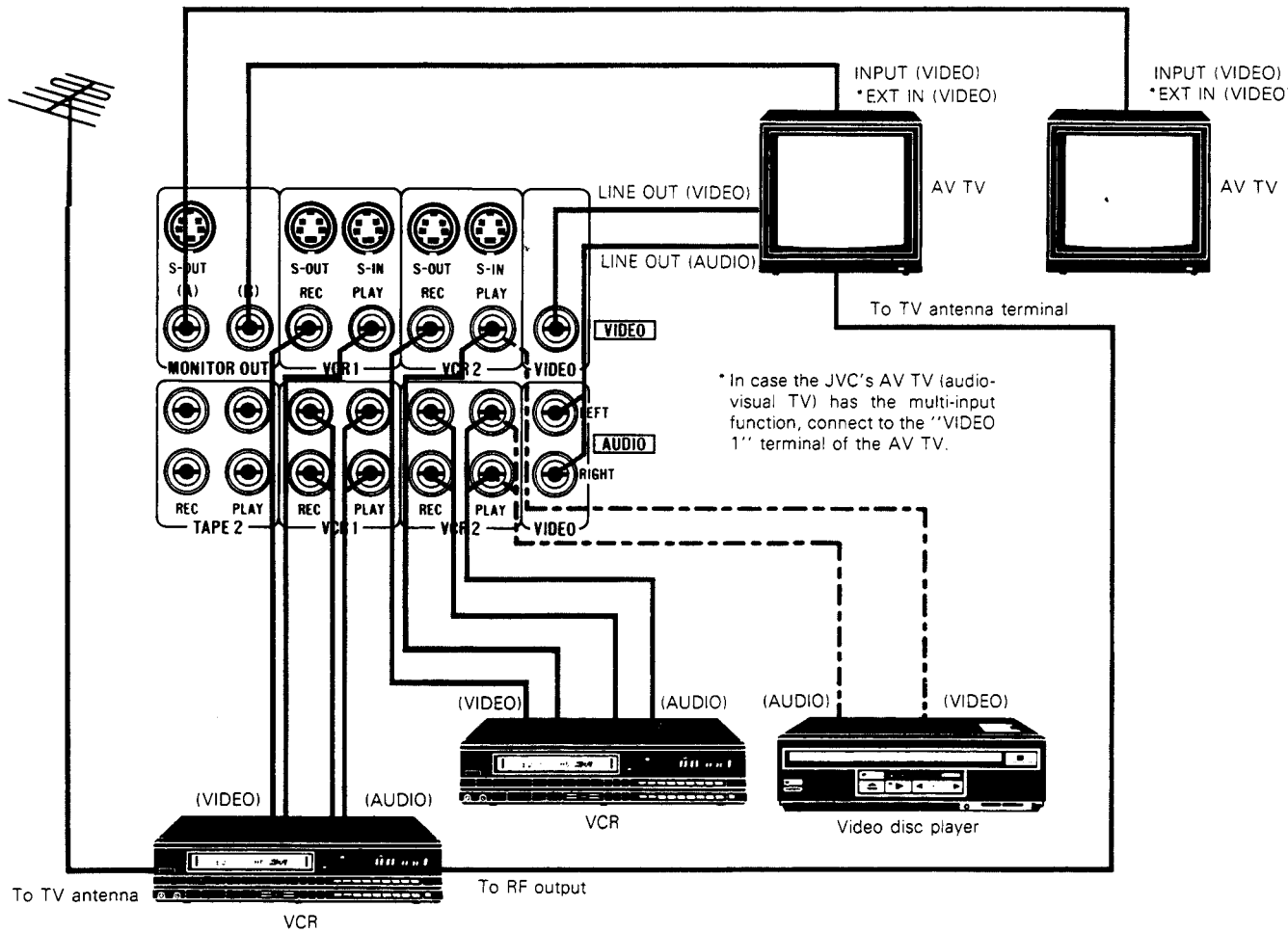
Switch the power off when connecting any cables.

Connections of Audio Components



Connections of Video Components

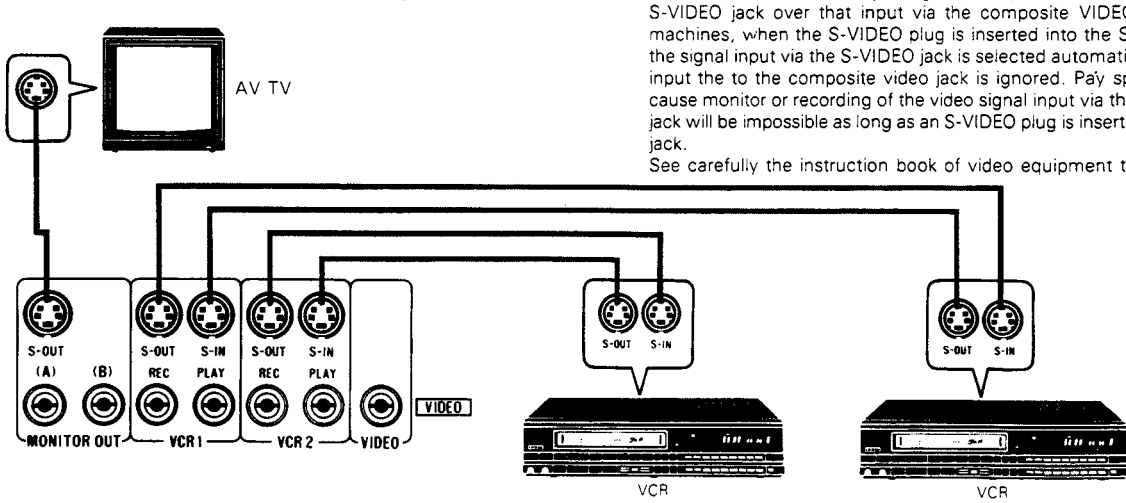
- Since mutual interference between video and audio components can cause noise and distorded pictures, you are recommended to use coaxial cable for the TV/video antenna.



Connecting to video equipment having S-VIDEO jacks.

- For audio terminal connections, see the diagram above.

Some VCRs with S-VIDEO jacks give priority to the video signal input via the S-VIDEO jack over that input via the composite VIDEO jack. With these machines, when the S-VIDEO plug is inserted into the S-VIDEO input jack, the signal input via the S-VIDEO jack is selected automatically and the signal input the to the composite video jack is ignored. Pay special attention because monitor or recording of the video signal input via the composite VIDEO jack will be impossible as long as an S-VIDEO plug is inserted into the S-VIDEO jack.
See carefully the instruction book of video equipment to be connected.



REAR PANEL

❶ ANTENNA terminals
❷ GND terminal

AUDIO terminals: For audio signal connection

❸ PHONO terminals
❹ CD terminals
❺ DAT REC terminals
PLAY terminals
❻ TAPE 1 REC terminals
PLAY terminals
❼ TAPE 2 REC terminals
PLAY terminals
❽ VCR 1 REC terminals
PLAY terminals
❾ VCR 2 REC terminals
PLAY terminals
❿ VIDEO terminals
⓫ CENTER OUT terminals
To use the center speaker (when playing back with DOLBY SURROUND PRO LOGIC), connect an amplifier to these terminals, and then connect the center speaker to the speaker terminal of the added amplifier.
⓬ PRE. OUT SELECTOR
PRE. OUT terminals
— Refer to the section "DOLBY SURROUND PRO LOGIC."

Notes:
- The VCR 1, VCR 2 and VIDEO terminals can also be used to input audio signals from audio equipment.
- Do not connect the remote cable when connecting the JVC cassette deck having COMPU LINK-1/SYNCHRO terminals to the TAPE 2, VCR 1 or VCR 2 terminals.

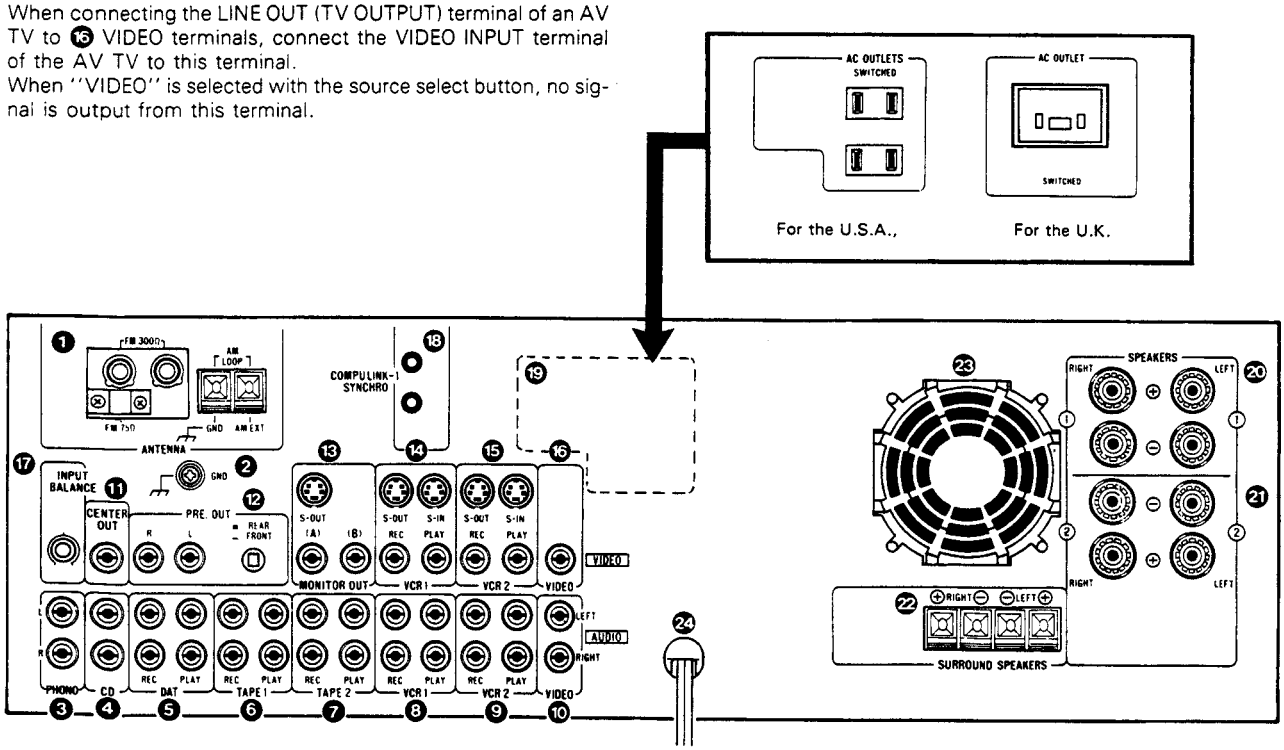
VIDEO terminals: For video signal connection

⓭ MONITOR OUT (A) terminal, S-OUT terminal
Connect the VIDEO INPUT terminal of an AV TV to this terminal
MONITOR OUT (B) terminal
When connecting the LINE OUT (TV OUTPUT) terminal of an AV TV to ⓰ VIDEO terminals, connect the VIDEO INPUT terminal of the AV TV to this terminal.
When "VIDEO" is selected with the source select button, no signal is output from this terminal.
⓮ VCR 1 REC terminal, S-OUT terminal
PLAY terminal, S-IN terminal
⓯ VCR 2 REC terminal, S-OUT terminal
PLAY terminal, S-IN terminal
⓰ VIDEO terminal

Others:

⓱ INPUT BALANCE
Refer to "DOLBY SURROUND PRO LOGIC"
⓲ COMPU LINK-1/SYNCHRO terminals
Connect to units provided with COMPU LINK-1/SYNCHRO terminals for the COMPU LINK control system function.
⓳ AC OUTLETS (SWITCHED)
⓴ SPEAKERS 1 terminals
㉑ SPEAKERS 2 terminals
㉒ SURROUND SPEAKERS terminals
㉓ Cooling fan
Excessive internal temperature rises in the RX-1010VTN will start running the fan to cool its interiors for circuit protection.
To ensure full air ventilation, do not block the fan with objects.
The fan will not run in normal conditions.
㉔ Power cord

Notes:
- When connecting components, connect their left and right channels correctly. If channels are reversed, the stereo effect will be degraded.
- Connect speakers with the correct polarity: (+) to (+) and (−) to (−). Reversed polarity will degrade the stereo effect. Be careful to prevent adjacent speaker wires from touching each other.
- Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the RX-1010VTN.
- The AC OUTLETS do not supply power when the power switch is turned off. Do not connect equipment requiring more than the outlet's rated value.
- Keep connection cords as far as possible from the TV.



ANTENNAS

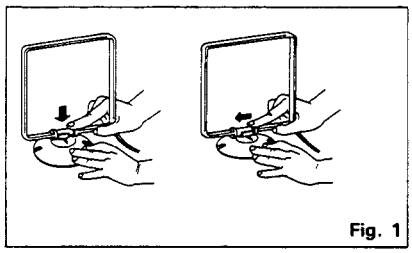


Fig. 1

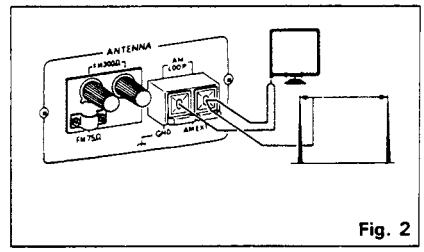


Fig. 2

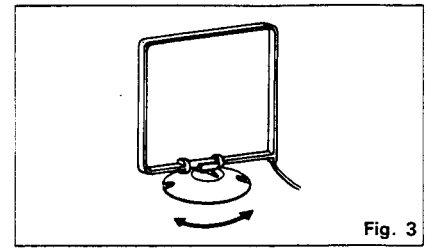


Fig. 3

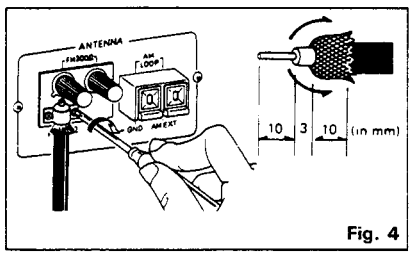


Fig. 4

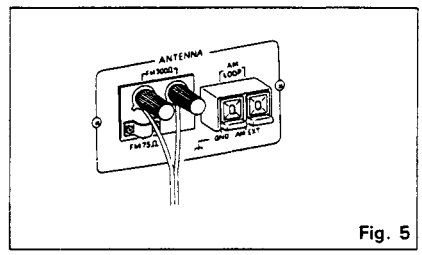


Fig. 5

AM antennas

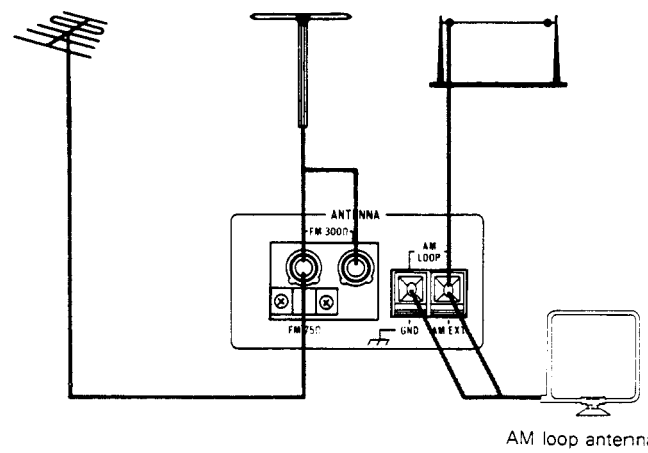
Figure 1: How to fix the AM loop antenna
Figure 2: AM loop antenna
This antenna is for the reception of local AM broadcasts.
Figure 2: AM external antenna
If AM reception is unsatisfactory, connect an external AM antenna (single-wire antenna) to the AM ANTENNA terminal.
Figure 3: Noise and interference
Change the direction of the loop antenna, or re-install it in a better position if the reception is noisy.

Notes:
- If the provided loop antenna is not connected or an uninsulated antenna wire touches the rear panel, it will be impossible to receive AM broadcasts.
- When installing an external AM antenna, leave the AM loop antenna connected.

FM antennas

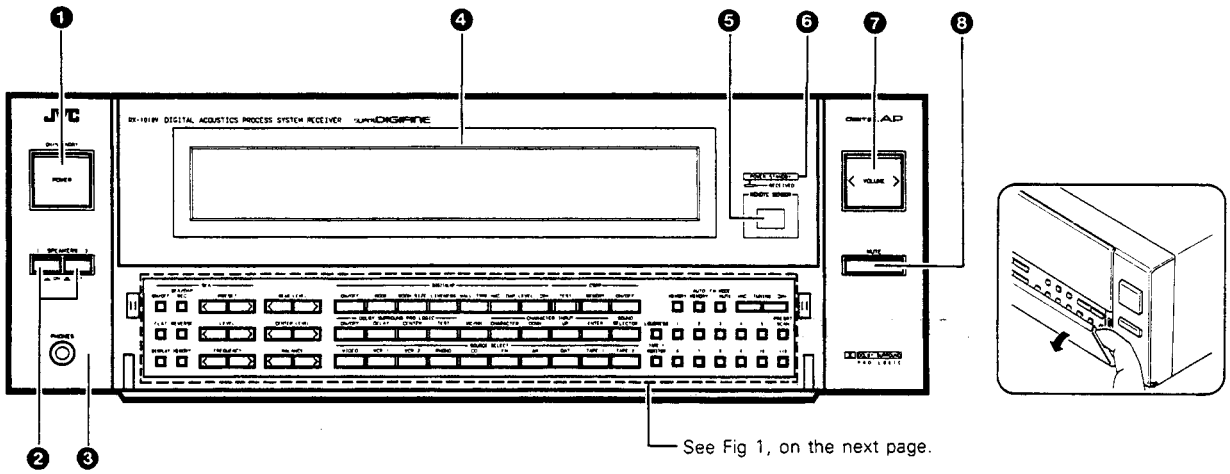
Figure 4: 75-ohm FM antenna with coaxial
Loosen the screws on the bracket and insert the cable through the ring from below. Connect the stripped core to the upper terminal then tighten the ring. The ring is the antenna ground.
Figure 5: FM feeder antenna
Connect to the 300-ohm terminal. Make sure the feeder antenna wires do not touch any other terminals.

Antenna Connections



FRONT PANEL

RX-1010VTN



See Fig 1, on the next page.

1 POWER (ON/STANDBY)
Press this button to turn the power ON. Press again to turn the power off and activate the STANDBY mode. The STANDBY indicator will light.
A small amount of power (5 watts) is consumed in the STANDBY mode. To turn the power off completely, disconnect the power cord from the wall outlet. Preset data is retained in memory while the power cord is plugged into the wall outlet. If the power cord is disconnected or a power failure occurs, data is retained for two or three days.

2 SPEAKERS 1, 2
Turns speakers 1 and 2 ON or OFF.

3 PHONES
Plug headphones into this jack. If you want to hear from the headphones alone, turn OFF speakers 1 and 2.

4 Display and indicator
Shows the operating status and the connected COMPU LINK equipment.

5 REMOTE SENSOR
Receives signals from the remote control unit.

6 RECEIVED and POWER STANDBY indicator
Lights when signals are received from the remote control unit or when the machine is in the STANDBY mode.

7 VOLUME < , >
Adjusts the volume of sound from the speakers or headphones.

8 MUTE
Turns sound ON or OFF temporarily.

9 SEA
Use the following keys for the S.E.A. Graphic Equalizer:

ON/OFF:	Turns the S.E.A. ON or OFF.
SEA/DAP REC:	Turns S.E.A. or DAP recording ON or OFF.
FLAT:	Flattens S.E.A. characteristics.
REVERSE:	Reverses polarity of the S.E.A. characteristics.
DISPLAY:	Displays S.E.A. patterns on the screen.
MEMORY:	Stores an S.E.A. pattern in memory.
PRESET <,>:	Calls an S.E.A. preset pattern.
LEVEL <,>:	Sets an S.E.A. level.
FREQUENCY <,>:	Calls a frequency band to correct.

10 CENTER LEVEL < , >
Sets the output level of the center channel.

11 REAR LEVEL < , >
Set the output level of the rear speakers.

12 BALANCE < , >
Adjusts the volume balance between the left and right speakers.

13 DOLBY SURROUND PRO LOGIC
Use these keys when you play back with the Dolby Surround Pro Logic sound effect.

ON/OFF:	Turns the Dolby surround Pro Logic sound effect ON/OFF.
DELAY:	Sets the delay time of the rear channels.
CENTER:	Selects the center channel mode.
TEST:	Turns the test tone ON/OFF.

14 DIGITAL AP (Digital Acoustics Processor)
Use the following keys for the DAP

ON/OFF:	Turn the DAP ON or OFF
MODE:	Selects the DAP mode.
ROOM SIZE:	Sets the desired sound field size.
LIVENESS:	Adjusts the depth of resonance.
WALL TYPE:	Adjusts the walls materials of simulated room.
DAP LEVEL< , >:	Adjusts the level of the DAP effect to be mixed with the normal stereo sound.

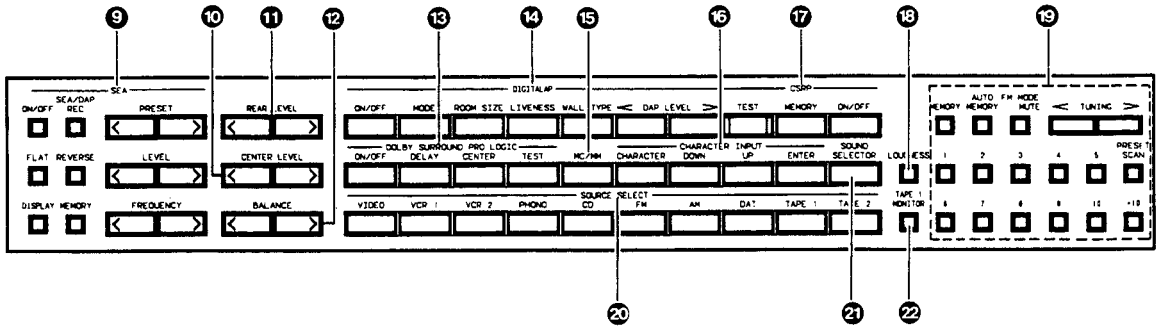


Fig. 1 Controls behind swing-down panel.

⑮ MC/MM
Alternate the cartridge mode between MC and MM.

⑯ CHARACTER INPUT
Use the following keys to assign titles or other data to the S.E.A. patterns or to TUNER channels you have preset:

CHARACTER:	Sets the CHARACTER INPUT mode.
DOWN, UP:	Press to select characters (letters, numerals, and symbols).
ENTER:	Store created titles in memory.

⑰ CSRP
COMPU LINK SOURCE RELATED PRESET SYSTEM feature

TEST:	Display all the CSRP data.
MEMORY:	Stores CSRP data in memory.
ON/OFF:	Turns the CSRP feature ON or OFF.

⑱ LOUDNESS
Turns LOUDNESS ON or OFF. The ON position makes up for loss of the human auditory sensation when the sound volume is low.

⑲ TUNER
Use the following keys to listen to AM or FM broadcasts:

MEMORY:	Stores an AM or FM frequency (station) on a preset channel.
AUTO MEMORY:	Stores an AM or FM frequency on a preset channel using the AUTO MEMORY feature.
FM MODE/MUTE:	Selects FM reception modes.
TUNING < , >:	Tunes in an AM or FM frequency.
1 – 10, +10 (Tuner numeric keys):	Press to select preset channels.
PRESET SCAN:	Press to scan preset channels in sequence.

⑳ SOURCE
Use the following keys to select sources:

VIDEO:	Press to watch the source from video equipment connected to the VIDEO terminals.
VCR 1:	Press to operate video equipment connected to the VCR 1 terminals.
VCR 2:	Press to operate video equipment connected to the VCR 2 terminals.
PHONO:	Press to listen to records.
CD:	Press to listen to CDs.
FM:	Press to listen to FM broadcasts.
AM:	Press to listen to AM broadcasts.
DAT:	Press to operate the DAT deck connected to the DAT terminals.
TAPE 1:	Press to operate the tape deck connected to the TAPE 1 terminals.
TAPE 2:	Press to operate the tape deck connected to the TAPE 2 terminals. (alternates between ON and OFF)

㉑ SOUND SELECTOR
When this button is pressed (the SOUND SELECTOR Indicator lights), the sound signal can be selected from a different AUDIO source in combination with the VISUAL signal originating from the VIDEO source.

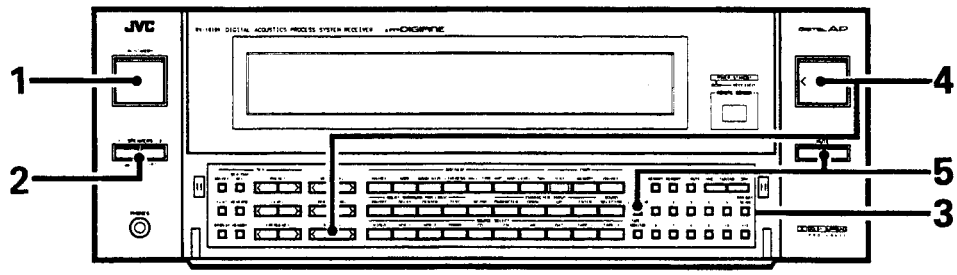
㉒ TAPE 1 MONITOR
When a 3-head tape deck is connected to the TAPE 1 terminals, Press this button to moniter the sound that has just been recorded on the tape.

OPERATION

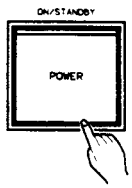
— Before Operating —

Before plugging the power cord into an AC outlet, check to be sure the individual components are connected correctly.

■ Basic operating procedures:

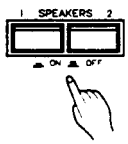


1. Turn the POWER switch to ON.

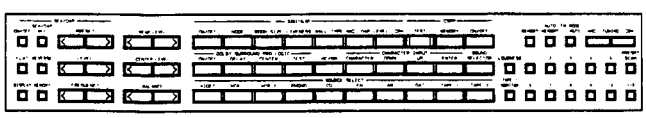


Note:
If a malfunction occurs when the power is ON, unplug the power cord and then plug it in again.

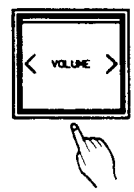
2. Select a speaker system by pressing one of the SPEAKERS keys.

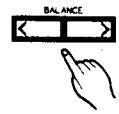


3. Operate these keys, as needed, by following the directions given further on.



4. Adjust the VOLUME and BALANCE keys to your taste.





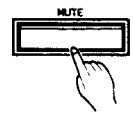
Note:
The sound volume rises as VOLUME reaches "0".
These keys vary their settings while they are being pressed.

5. Press the LOUDNESS and MUTE keys as needed.

- Press to make up for loss of the human auditory sensation when the sound volume is low.

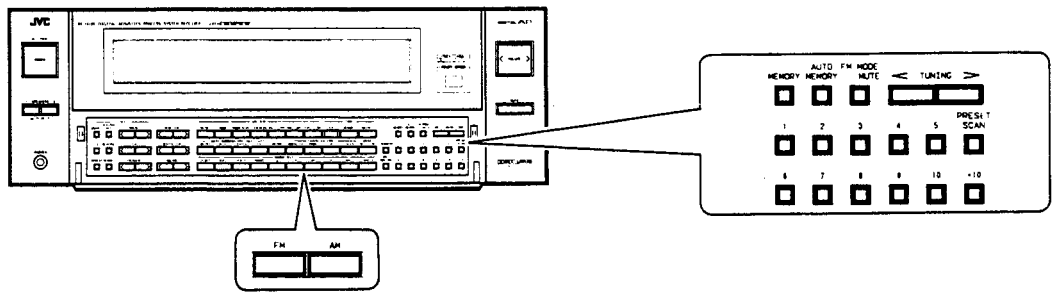
LOUDNESS

- Press to temporarily cancel sound output.



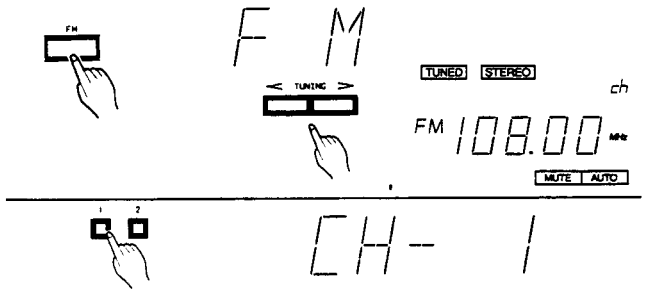
Note:
The MUTE key is reset when the VOLUME or BALANCE keys are pressed.

■ Listening to AM or FM Broadcasts



Press the AM or FM key and the TUNING keys to select a station, or press numeric keys to select a preset channel. (See "Presetting Stations")

<If you select FM.>



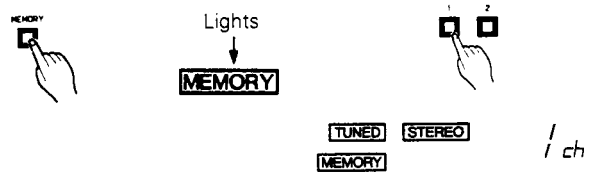
- The TUNED indicator will light when a station is tuned in correctly. Adjust the antenna if the indicator does not light.
- While tuning in an FM station, press the MODE/MUTE key to light the MUTE/AUTO indicator. This cuts out interstation noise while tuning. The STEREO indicator will light when an FM stereo station is tuned in correctly. If the FM stereo station is weak and noisy, press the MODE/MUTE key again to turn off the MUTE/AUTO indicator to improve reception (broadcast becomes monaural).

Note:
To select a station with the TUNING keys, press the FM or AM key first.
Each time the TUNING keys are pressed, the frequency is varied in steps of 10 kHz for AM and 100 kHz for FM. The setting will vary continuously while the keys are pressed and held. Auto-tuning starts when the keys are released and stops when a station is tuned. To halt auto-tuning, press a TUNING key.

— Presetting Stations —

You can preset a total of 40 AM and FM stations (CH-1 through CH-40).

1. Tune in the desired station with the TUNING keys.
2. Press the MEMORY key to light its indicator. Enter the channel number with the numeric keys while the indicator is on (for about 5 seconds).



Note:
If the indicator turns off before you enter the channel number, press the MEMORY key again.

3. Repeat this procedure to preset other channels.

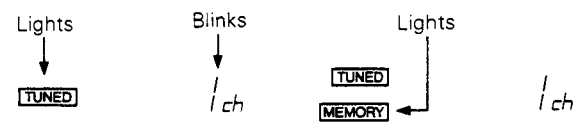
AUTO-MEMORY

The auto-memory feature scans frequencies upward and presets stations as they are tuned, in ascending channel number order.

1. Using the TUNING keys, select the frequency from which you want auto-memory to start (the lower-limit frequency).
2. Press the AUTO MEMORY key to light its indicator. Enter the starting channel number with the numeric keys while the indicator is on (about 5 seconds).

Note:
If the indicator turns off before you enter the channel number, press the AUTO MEMORY key again.

3. The auto-memory feature starts scanning frequencies upward. The TUNED indicator will light when a station is tuned, with the channel number blinking (for about 5 seconds). The presetting is complete when the MEMORY indicator is lit. This continues until the upper-limit frequency is reached or all 40 channels are filled.



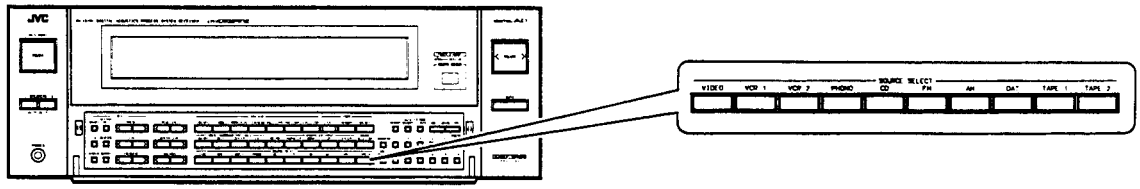
Note:
If you do not want to preset a station, resume scanning by pressing the AUTO MEMORY key while the channel number is blinking. To halt the auto-memory feature, press any TUNER key other than the AUTO MEMORY key.

Using Numeric Keys
To indicate numbers 1 through 10, simply press the appropriate keys. To indicate numbers over 10, press the appropriate combination of keys.
Examples:
To indicate 17, press "+10", then "7".
To indicate 20, press "+10", then "10".
To indicate 26, press "+10" twice, then "6".
To indicate 40, press "+10" three times, then "10".

PRESET SCAN

The PRESET SCAN key is convenient for locating desired channels. When this key is pressed, the preset channels are scanned upward in sequence. Each channel is received for about 4 seconds while the corresponding channel number blinks. When the desired channel is located, press the PRESET SCAN key again to stop scanning. Scanning ends when one cycle of 40 channels is completed. The receiver returns to the station tuned in prior to the start of scanning.

■ Playing Back Sources (VIDEO, VCR 1, VCR 2, PHONO, CD, DAT, TAPE 1, TAPE 2)



Press the SOURCE key for the desired source, and operate the corresponding equipment.

<If you select CD>

CD player can be operated.

- Pressing the TAPE 2 key will not change the display source indication, but the TAPE 2 MONITOR lights. To play another source, press the TAPE 2 key again to turn off the indicator.
- When you have selected PHONO, set the MC/MM key to suit the type of the cartridge used in the turntable.
  MC: Set to this mode when a using MC cartridge having an output voltage of less than 0.5mV.
  MM: Set to this mode when using a MM cartridge or a MC cartridge having an output of 0.5mV or higher.
  The selected mode indicator lights.

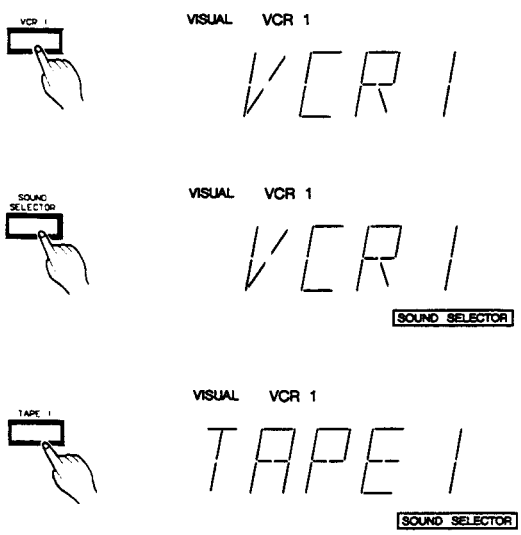
Note:
To operate other source equipment, refer to the appropriate instructions.

■ Listening to Another Audio Source While Watching VCR 1, VCR 2 or VIDEO

1. Press the VCR 1, VCR 2 or VIDEO key.

2. Press the SOUND SELECTOR key and then select the desired audio source using the SOURCE SELECT keys.

<If you wish to listen to TAPE 1 while watching VCR 1>



The SOUND SELECTOR function also can be used for recording.

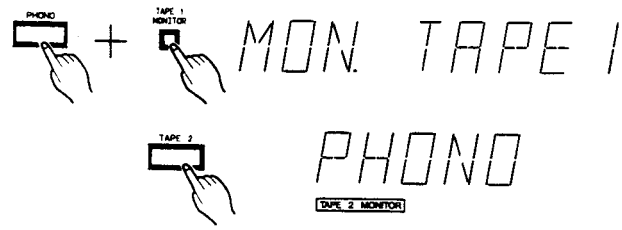
■ Recording

Press the SOURCE key for the desired source, and operate the corresponding source equipment and tape deck.

<If you select PHONO.>

Turntable and tape deck can be operated.

- Both TAPE 1 terminals and TAPE 2 terminals can be connected a three-head tape deck to monitor the recording. Press the appropriate SOURCE key and the TAPE 1 MONITOR or TAPE 2 key, and operate the source equipment and three-head tape deck.



Turntable and three-head tape deck can be operated.

Note:
Set the recording level from the tape deck. It can not be set with the VOLUME control of this machine.

— Dubbing Tapes —

<To record from TAPE 1 to TAPE 2>
1. Press TAPE 1.
2. Play back the TAPE 1 deck and record with the TAPE 2 deck.

<To record from TAPE 2 to TAPE 1>
1. Press the TAPE 2 key and a SOURCE key other than TAPE 1.
2. Play back the TAPE 2 deck and record with the TAPE 1 deck.

- Dubbing can be similarly performed between TAPE 1, TAPE 2, DAT, VCR 1 and VCR 2. When dubbing from the TAPE 2 deck to another tape deck, press the TAPE 2 key together with the SOURCE key other than the tape deck.

USING THE S.E.A. GRAPHIC EQUALIZER

The S.E.A. Graphic Equalizer breaks down the audible frequency range into seven bands at intervals of 4/3 octave. Each band of tones can be adjusted as disired by the listener (± 10dB in steps of 2 dB on the basis of 0dB). Thus allowing you to make the necessary adjustments in the presicely appropriate frequency bands.

***You can customize the sound to your taste.**

***You can correct subtle frequency to suit the acoustic characteristics of your listening room.**

***You can compensate for the conditions of audio equipment.**

Use the following keys for the S.E.A. Graphic equalizer.

ON/OFF:	Turns the S.E.A. Graphic equalizer.
SEA/DAP REC:	Turn the S.E.A. recording ON or OFF.
FLAT:	Flatten the S.E.A. characteristics.
REVERSE:	Reverses polarity of the S.E.A. characteristics.
DISPLAY:	Display the current S.E.A. pattern in ascending frequency.
MEMORY:	Stores an S.E.A. pattern in memory.
PRESET <,>:	Calls an S.E.A. preset pattern.
LEVEL <,>:	Set an S.E.A. level.
FREQUENCY <,>:	Calls a frequency band to correct.

S.E.A. preset patterns

A total of 10 preset patterns can be used: 5 programmed preset patterns, and 5 manual patterns which you create (SEA-A through E).

— Program pattern features —

These five S.E.A. patterns were preset at the factory to offer suggested settings for various types of audio programs. Each preset pattern is shown below.

HEAVY:
For music with a heavy beat, such as disco music.

CLEAR:
For crisp, clear sound with transparent highs.

SOFT:
For background music, at low volume level.

MOVIE:
For TV, VCR, and videodisc sound.

VOCAL:
For music that is chiefly vocal, or speech.

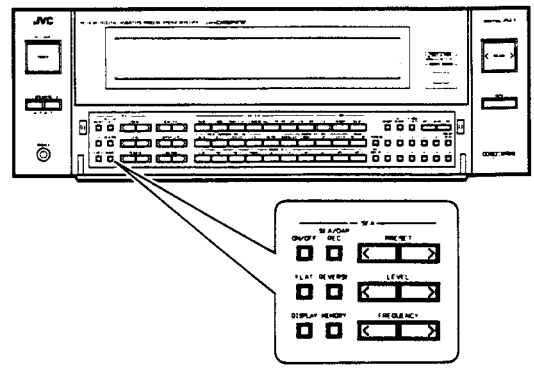
- After recalling these patterns, you can further change each frequency band to suit yourself. However, since they are representative patterns, the original, stored pattern will be unchanged.

S.E.A. recording

The sound corrected by S.E.A. can be recorded on the tape deck connected to the TAPE 1, DAT, VCR 1 or VCR 2 terminal.

- The SEA REC key is not functional when the SEA ON/OFF key is OFF, or Dolby Surround Pro Logic is ON.

S.E.A. Operation

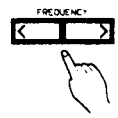


— Creating an S.E.A. pattern —

1. Press the SEA ON/OFF key.

SEA ON

2. Press the FREQUENCY keys to call the desired frequency.

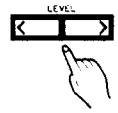


63 0

Order < FREQUENCY >

[63Hz]→[160Hz]→[400Hz]→[1kHz]→[2.5kHz]→[6.3kHz]→[16kHz]

3. Press the LEVEL keys to adjust the SEA level.

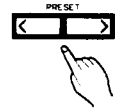


63 +2

Repeat Step 1 ~ 3 for each additional frequency desired.

Note:
When a frequency has been called, press the LEVEL keys while the frequency is displayed (about 5 seconds). If the display is cleared before you press the LEVEL keys, it can be recalled by pressing either FREQUENCY key.

— Recalling a preset pattern —



SEA ON

SEA PRESET F HEAVY

Display shows the title of recalled pattern.

Order < PRESET >

"SEA"→[SEA-A]→[SEA-B]→[SEA-C]→[SEA-D]→[SEA-E]→[HEAVY:F]→[CLEAR:G]→[SOFT:H]→[MOVIE:I]→[VOCAL:J]

- SEA Recording

SEA ON
SEA REC
SEA PRESET A

Operate the recording procedure as instructed in "recording".

S.E.A. recording is not available with the tape deck connected to the TAPE 2 terminals.

- Flatten the SEA characteristics.

FLAT

FLAT indicator lights (for about 5 seconds).

Pressing the FLAT key while a pattern is yet to be preset will clear it. Be careful not to press the FLAT key inadvertently.

- Reverse

REVERSE SEA

The S.E.A. pattern is displayed in ascending frequency. Then REVERSE indicator turns off.

Press again to return to the original polarity.

- Display

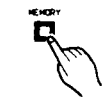
SEA

The S.E.A. pattern is displayed in ascending frequency order (for a preset pattern, its title).

To stop the display, press DISPLAY key again.

— Presetting Manual Patterns —

1. Create an S.E.A. pattern to preset as instructed in "Creating an S.E.A. pattern".
2. Press MEMORY key to blink its indicator. Call one of the patterns to store (SEA-A through E) by pressing the PRESET keys while the indicator is blinking (about 5 seconds).



MEMORY
Blinks

SEA-A

Order < PRESET >

[SEA-A]—[SEA-B]—[SEA-C]—[SEA-D]—[SEA-E]

Note:
Press the MEMORY key again if the indicator stops blinking before you press the PRESET keys.

3. Press the MEMORY key again while the indicator is blinking (about 5 seconds). Memory presetting is complete when the MEMORY indicator stops blinking.

SEA ON
SEA PRESET A

The preset SEA patterns can each be given a five-character title. See the section "Entering Characters" for futher details.

- **The reverse feature** offers you a noise reduction effect during tape recording. First, record sources with emphasis on high-pitched tones by using SEA; during playback, activate reverse SEA, to cut hissing noise inherent in tape recording.

- **The S.E.A. ON/OFF key** enable you to compare the sound corrected by S.E.A. with the original (not corrected) sound during procedure creating S.E.A. pattern. Pressing the ON/OFF key to turn the S.E.A. OFF offers you the sound not corrected. When press ON/OFF key again the S.E.A. pattern being created could be recalled, and corrected sound would be heard.
  *Because pressing the FLAT key while a pattern yet to be preset will clear it, be sure to use ON/OFF key.
- SEA is functional only with FRONT channel signals.

Frequency band responses

63 Hz: Raise to emphasize the very low base response of organs, drums, and contrabass. When de-emphasized, eliminated unclear response at low frequencies.

160 Hz: Emphasize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the base on which music is constructed. Emphasize to put real punch in your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice.

2.5 kHz: The human hearing is most sensitive to this freuqncy. If the music sounds hard or metallic, de-emphasize it.

6.3 kHz: This frequency band varies the tonal expression, influencing the subtleties of the music.

16 kHz: Boosting this frequency range suitably adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension.

Preset Pattern Frequency Responses (Unit: dB)

Frequency band / Preset pattern	63Hz	160Hz	400Hz	1kHz	2.5kHz	6.3kHz	16kHz
HEAVY	+10	+2	−2	0	0	+2	+4
CLEAR	+4	−4	0	+4	+2	+4	+6
SOFT	+2	0	0	0	0	−2	−6
MOVIE	+6	+2	0	0	−2	0	+2
VOCAL	−2	−2	+2	+4	+2	0	+2
SEA-A							
SEA-B							
SEA-C							
SEA-D							
SEA-E							

Note: To assign titles to the preset patterns, see "Entering Characters".

DIGITAL ACOUSTICS PROCESSOR (DAP)

Digital Acoustic Processor (DAP) incorporated in the RX-1010 VTN creates a sound field (the reflected sound that a listener hears from various directions) which simulates that in a concert hall, etc.

You can get the exciting sound you would at a live performance.

Use the following keys for DAP	
ON/OFF:	Turn the DAP ON or OFF.
MODE:	Selects the DAP mode.
ROOM SIZE:	Sets the desired sound-field size in 5 steps.
LIVENESS:	Adjust the depth of resonance in 5 steps.
WALL TYPE:	Adjust the walls materials of simulated room in 3 steps.
DAP. LEVEL:	Adjust the level of the DAP effect to be mixed with the normal stereo sound.
REAR LEVEL:	Set the output level of the rear speakers.
SEA/DAP REC:	Turns the DAP recording ON or OFF.

DAP MODE:

The DAP can create seven modes of acoustic space.

SYMPHONY HALL: (HALL 1):
This simulates the sound field of a typical concert hall for classical music, having 2000 seats.

RECITAL HALL: (HALL 2):
This simulates the sound field of a small concert hall for chamber music, etc, having 500 seats.

OPERA HOUSE:
This simulates the sound field of an opera house with a high ceiling and a short depth where the seats are tiered.

CHURCH:
This simulates the sound field of a church with a high ceiling, which has longer-duration reflections.

LIVE CLUB:
This simulates the sound field of a live club with a low ceiling and an intimate atmosphere where musicians play near the audience.

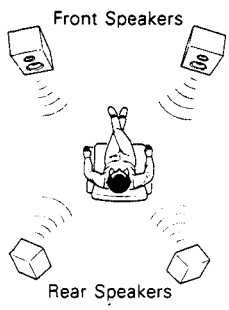
STADIUM:
This simulates the sound field of a large open-air arena with tiered stand.

MOVIE THEATER:
This simulates the sound field of a movie theater. Use this mode to play back video software that does not bear the double-D DD mark.

• DAP recording

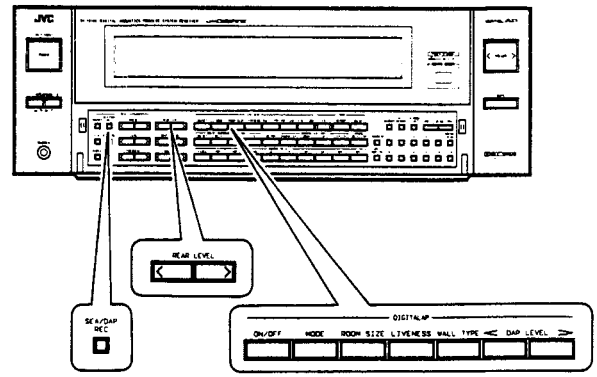
The sound effected DAP by can be recorded on the tape deck connected to the TAPE 1, DAT VCR 1 or VCR 2 terminal.
DAP REC key is not functional when the DAP key is OFF, or Dolby Surround Pro Logic is ON.

< speaker layout example >

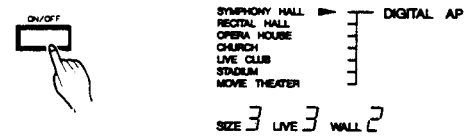


- You can enjoy the benefits of the DAP in a regular 2-channel playback stereo system, but greater presence can be experienced in a 4-channel system with the addition of rear speakers.
- If rear speakers are used, connect them to the SURROUND SPEAKER terminals.
- The rear speakers should prove most effective when installed somewhat higher than the height of your ears at the listening position.

■ Playing Back with DAP sound Effect

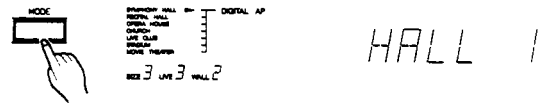


1. Set the DAP key to ON.



2. Set the DAP mode with the MODE key.

< If you select SYMPHONY HALL >



Each time you press the MODE key, the mode will change in the following order.

HALL 1 — HALL 2 — OPERA HOUSE — CHURCH
MOVIE THEATER — STADIUM — LIVE CLUB

3. Play back the source.

4. Set the level of the DAP effect sound to be mixed with the front speakers, using the DAP LEVEL keys.

Order
no effect —[−16]—[−14]—[−12] ···· [−6] ···· [0] ···· [+6]
average value

5. Set the output level of the rear speakers using the REAR LEVEL keys. (only for 4ch. operation)

Order
[−20]—[−18]—[−16] ···· [0] ···· [+16]—[+18]—[+20]
average value

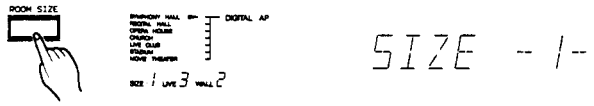
- The REAR LEVEL helps balance the sound with respect to the front speakers. Select the setting you prefer as you listen to the source.

■ Parameter change

By changing the parameters, you can create your own original sound-field pattern.

• ROOM SIZE

< If you select "1" >



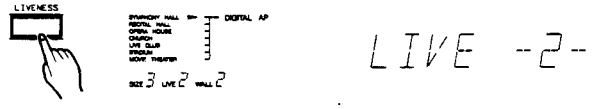
Each time you press the key, the room size changes in the following order:

→Wide

┌→ 1 → 2 → 3 → 4 → 5┐
└──────────────────┘

• LIVENESS

< If you select "2" >



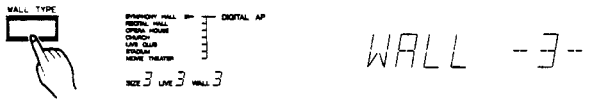
Each time you press the key, the Liveness changes in the following order:

→Deep

┌→ 1 → 2 → 3 → 4 → 5┐
└──────────────────┘

• WALL TYPE

< If you select "3" >



Each time you press the key, the wall type changes in the following order:

→Hard

┌→ 1 → 2 → 3┐
└──────────┘

• DAP Recording

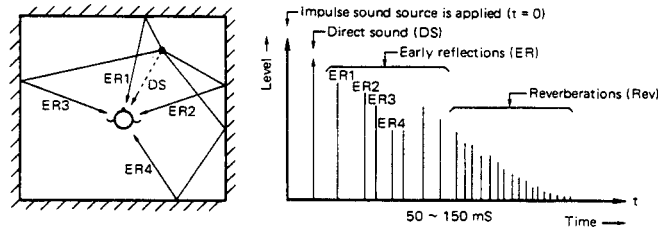
Operate the recording procedure as instructed in "Recording" page 11.

DAP recording is not available with the tape deck connected to the TAPE 2 terminals.

■ Parameter information

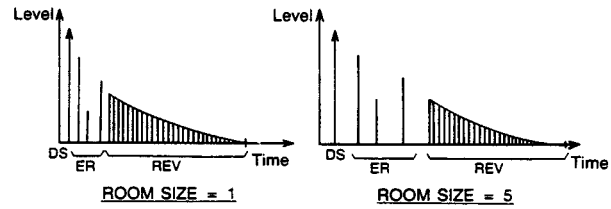
The sound patterns comprising a sound field is classified into three types of sound:

- Direct sound from the sound source
- Reflected sound from wall and ceiling (Early Reflections)
- Reverberating sound, repetition of reflected sound



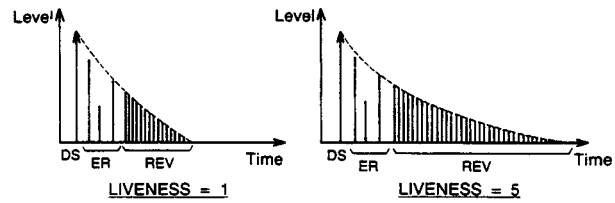
The following three parameters help you create a sound field tailored to your taste by varying these sets of data in a complex manner:

ROOMSIZE



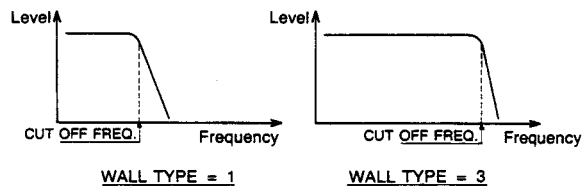
Early reflection intervals vary with changes in predelay time.

LIVENESS



The decay time for early reflections and reverberations as a whole varies.

WALL TYPE



The cut-off frequency of the low-pass filter for producing sound effects varies.

DOLBY SURROUND PRO LOGIC

The soundtrack of the video software a DOLBY SURROUND mark includes exactly the same surround sound information as the films you see in movie theatres.
As RX-1010VTN incorporates a Dolby Pro Logic surround decoder circuit, you can get the Dolby Stereo theatre's ambience and effect, when watching these video softwares.

Dobly surround Pro Logic decoder provides:
- Four primary sound channels — LEFT, RIGHT SURROUND and aditional CENTER channel.
- Adaptive Matrix to actively derive each channel signal.

The result is that Dolby Pro Logic has the effect of widening the useful listening area and enhansing directional effects.

You can enjoy listening to all Dolby surround software previously available.

Use these keys when you play back with Dolby surround Pro Logic.	
ON/OFF:	Turns the Dolby surround Pro Logic sound effect ON/OFF
DELAY:	Sets the delay time of the rear channels.
CENTER:	Selects the center channel mode.
TEST:	Turns the test tone ON/OFF.
REAR LEVEL <,>:	Sets the output level of the rear speakers.
CENTER LEVEL <,>:	Sets the output level of the center speakers.

CENTER CHANNEL MODE

There are four center channel modes:

NORMAL:
Select this mode when using a compact speaker (which has difficulty reproducing low frequencies) to reproduce center channel signals.
- Center channel signals are reproduced through the center speaker, with low frequencies being cut off.
- Low-frequency center channel signals are reproduced from the front left and right speakers.

WIDE:
Select this mode when using a speaker similar to the front speakers to reproduce center channel signals.
- Center channel signals are reproduced through the center speaker as they are.

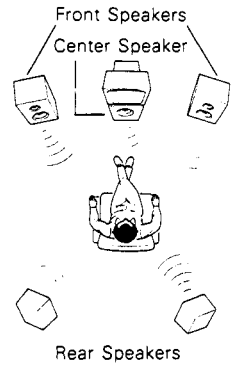
PHANTOM:
Select this mode when not using the center speaker.
- Center channel signals are distributed between the front left and right speakers with an equal level.

OFF:
Select this mode when adjusting the left and right input balance.

TEST (Adjusting the output level balance)

Pressing the TEST key outputs a test tone. Using this test tone, the output level balance between channels can be adjusted easily.

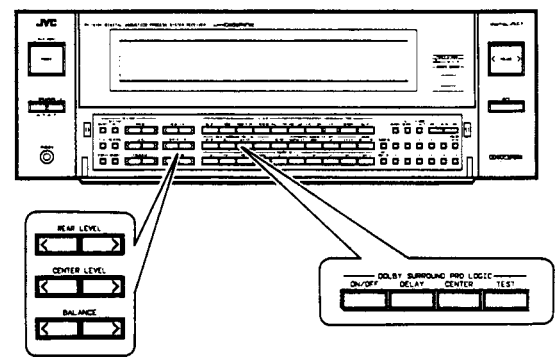
< Speaker layout example >



It is recommended that antimagnetic speakers be installed near the TV monitor (particularly, the center speaker).

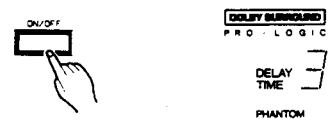
- To use the center speaker, connect an amplifier to the CENTER OUT terminal on the rear panel, and then connect the center speaker to the speaker terminals of the added amplifier.
- The center speaker is not required if you have selected the PHANTOM mode with the CENTER key.

■ Adjustment



Make the following adjustment to get maximum out of the surround sound effect:

1. Set the ON/OFF key to ON.



— Adjusting the input level balance —

2. Set the center OFF mode with the center key.

Each time you press the CENTER key, the mode will change in the following order.

→ PHANTOM → NORMAL → WIDE → OFF →

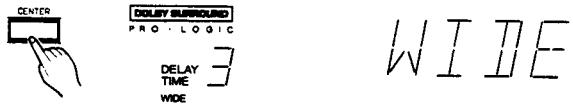
3. Playback a monaural source (AM broadcast, etc.) with DOLBY SOURROUND still set.

4. Adjust the INPUT BALANCE knob so that the sound coming from the front and the rear speakers is reduced to a minimum.

— Adjusting the output level balance —

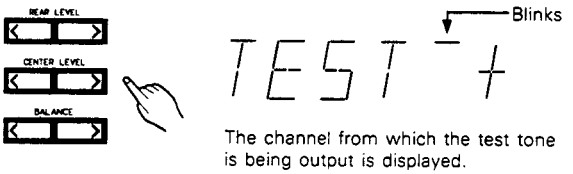
5. Select the CENTER mode with the CENTER key.

<If you select "WIDE">



6. Press the TEST key to turn the Test tone ON.

7. You can hear the test tone clockwise through left-center-right-surround repeatedly.
Adjust the test tone to the same level with the REAR LEVEL keys, CENTER LEVEL keys, and the BALANCE keys.



The channel from which the test tone is being output is displayed.

- You can set the rear level and the center level up to ±20 dB using 0 dB as the average value.

< REAR LEVEL >, < CENTER LEVEL >

Order

[−20]—[−18]—[−16]····· [0] ····· [+16]—[+18]—[+20]

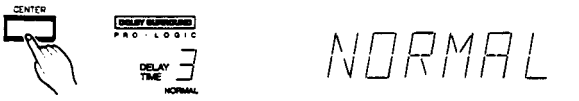
Center level adjustment is not required if the PHANTOM mode has been selected.

■ Playing Back with a Surround-sound Effect.

1. Set the ON/OFF key to ON.

2. Set the Center channel mode with the CENTER key.

< If you select NORMAL mode >



3. Play back the source.

4. Set the delay time for the rear speaker sound with respect to the front speaker sound using the DELAY TIME key.

< If you select "3" >

Each time you press the key, the delay time changes in the following order:

1 → 2 → 3 → 4 → 5

Setting advice:
Compare the distances between the front speakers and the listener and the rear speakers and the listener. The difference will help you to select the proper setting. Delay time varies from 1 to 5 with 3 as the average value.
If the position of the rear speakers, compared to the front speakers, is .....

very far	→ set 1
somewhat far	→ set 2
about the same	→ set 3
somewhat close	→ set 4
very close	→ set 5

After you have made an initial setting, make additional adjustments while listening to the source sound.

Note:
The DELAY TIME is stored in each mode until you make another change.

PRE. OUT

REAR

While this button is not pressed, REAR (SURROUND) channel signals are output from the PRE OUT terminals. Use this button to upgrade the REAR channel output or sound quality.

FRONT

When this button is pressed, the FRONT (L, R) channel signals are output from the PRE OUT terminals. At the same time, the built-in FRONT channel amplifier (120 W) is switched to allow REAR channel signals to be output from the speaker terminals.
Use this button when you want to improve the output and sound quality from the FRONT channels, and increase the output sound from the rear speakers.

The function also allows you to enhance the performance of the stereo system when using regular 2-channel playback.

- This switch and terminals work the same way during DAP playbacks.
- Turn the power off, when switch the PRE. OUT selector.

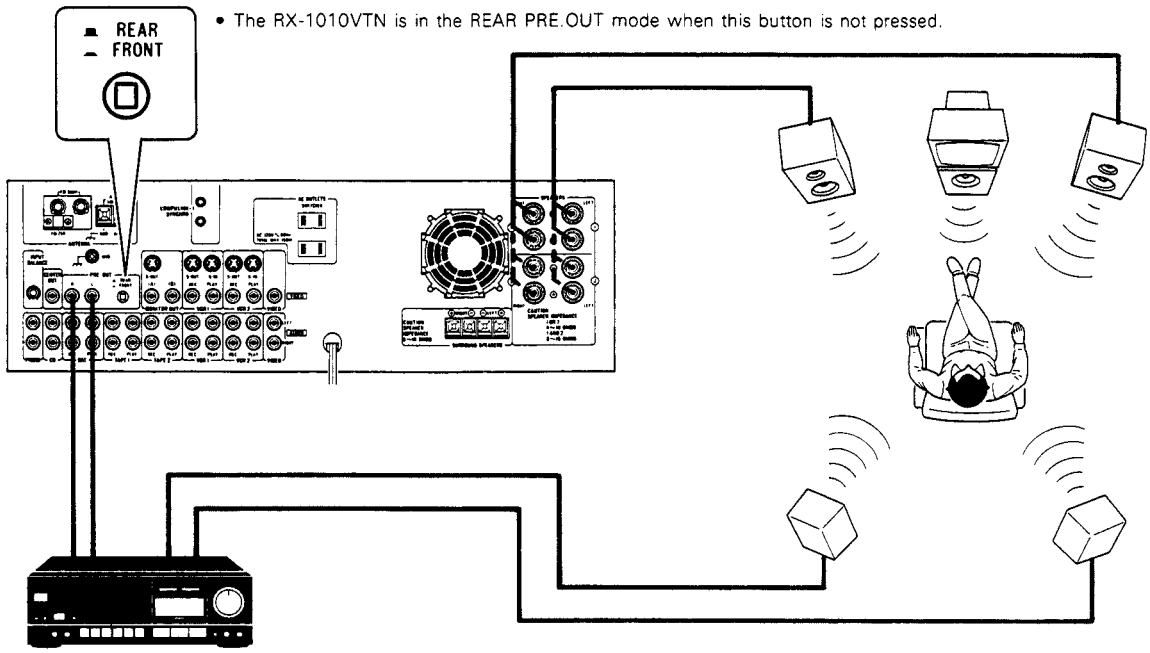
DOLBY SURROUND PRO LOGIC DOLBY SURROUND PRO · LOGIC

- Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. Numbers 3,632,886, 3,746,792 and 3,959,590; Canadian Numbers 1,004,603 and 1,037,877.
"DOLBY" and double D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

■ PRE.OUT terminal connection

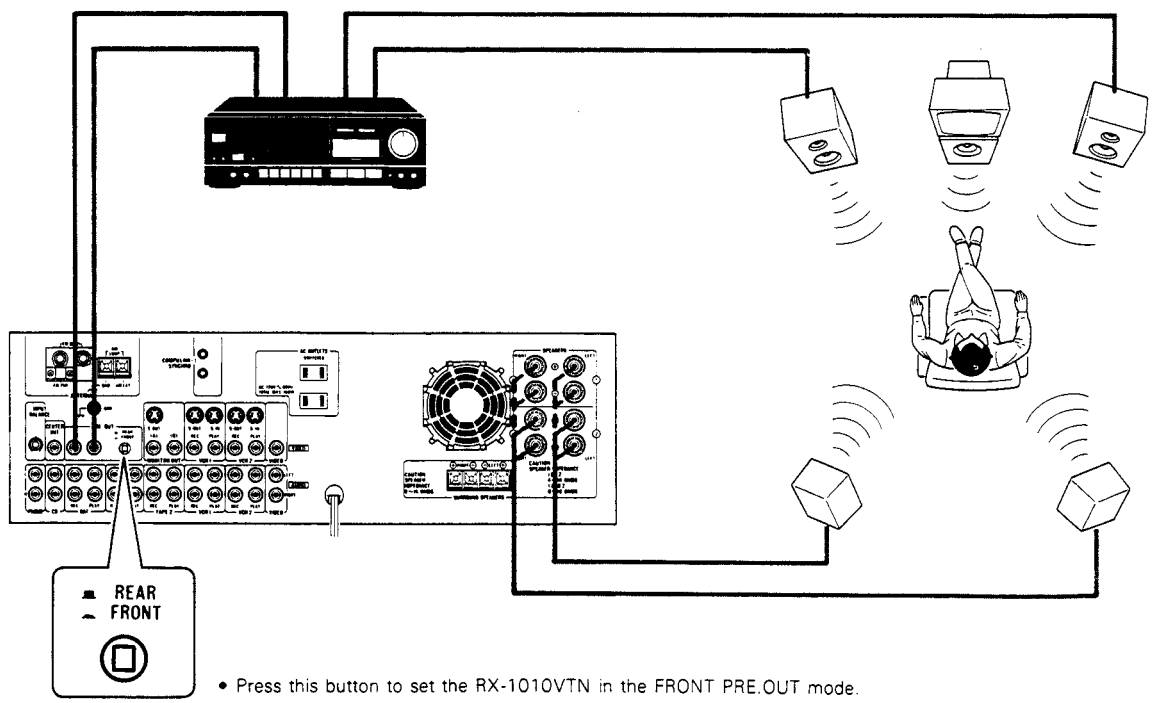
- Read well the instruction book for the amplifier to connect the PRE.OUT terminals to.
- For how to connect the CENTER speaker, see CONNECTION DIAGRAM on page 2.

< Using an external amplifier to reproduce signals on REAR channels >



• The RX-1010VTN is in the REAR PRE.OUT mode when this button is not pressed.

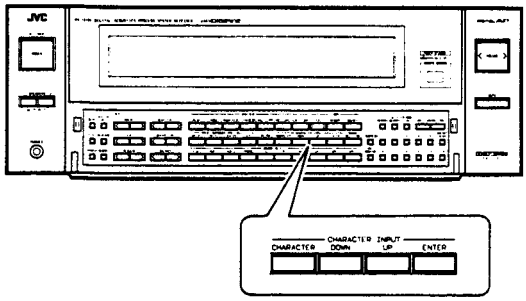
< Using an external amplifier to reproduce signals on FRONT channels >



• Press this button to set the RX-1010VTN in the FRONT PRE.OUT mode.

ENTERING CHARACTERS

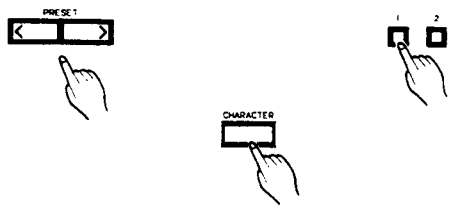
A five-character title or station name can be assigned to each S.E.A. preset pattern (SEA-A to E) or TUNER preset channel (CH-1 to 40).



1. Specify a S.E.A. manual preset pattern (SEA-A through E using the keys PRESET <and>), or a TUNER preset channel (using the numeric keys). Press the CHARACTER key.

<To specify a S.E.A. pattern>
Use the S.E.A. PRESET keys, <and>.

<To specify a Tuner Preset Channel>
Use the numeric keys.

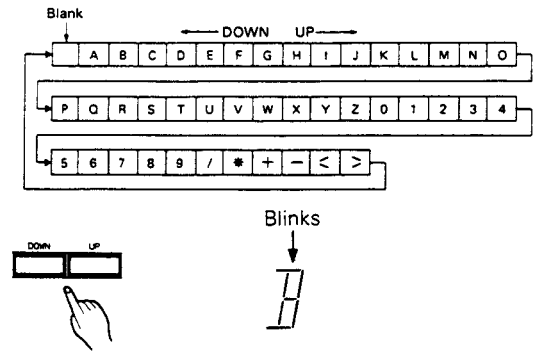


The cursor at the left blinks.
If a character has already been entered, the character blinks.

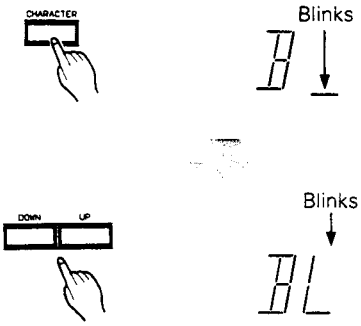
Note:
For details on S.E.A., see "Using the S.E.A. Graphic Equalizer". When a preset S.E.A. pattern has been called, press the CHARACTER key while the pattern is displayed (about 5 seconds). If the display is cleared before you press the CHARACTER key, press either PRESET key.

2. Select the appropriate characters with the UP and DOWN keys.

Alphanumeric character order.

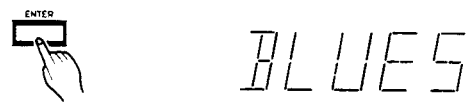


3. Press the CHARACTER key to move to the next position. Repeat steps 2 and 3 to enter up to 5 characters.



- To alter the characters, move the blinking cursor to the desired character for correction using the CHARACTER key.

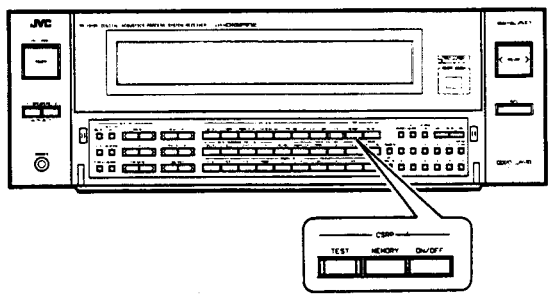
4. When the entry is complete, press the ENTER key to store it in memory.



RUNNING THE CSRP (COMPU LINK SOURCE RELATED PRESET SYSTEM) FEATURE

CSRP is the state-of-the-art electronic feature that presets volume, balance, and other control settings. This was previously done manually each time a different source was played back. This feature lets you invoke preset control settings by simply pressing a SOURCE key or calling up a TUNER preset channel without repeating many settings each time sources are changed.

Operation



— Presetting the CSRP data —

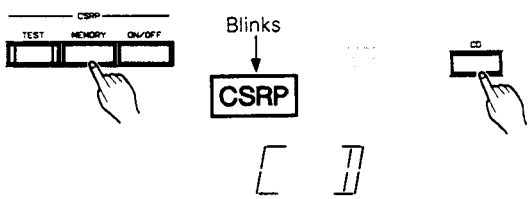
1. Before proceding, set the preset state.

The following controls can be preset on each SOURCE key (except TAPE 2) or TUNER preset channel:

- •VOLUME
- •BALANCE
- •LOUDNESS ON/OFF
- •SEA ON/OFF
- •S.E.A. preset pattern
- •PRO LOGIC ON/OFF
- •PRO LOGIC CENTER MODE
- •PRO LOGIC CENTER LEVEL
- •PRO LOGIC DELAY TIME
- •PRO LOGIC/DAP REAR LEVEL
- •DAP ON/OFF
- •DAP MODE
- •DAP LEVEL
- •DAP ROOM SIZE
- •DAP LIVENESS
- •DAP WALL TYPE

2. Press the MEMORY key to blink its indicator. Press either the SOURCE key you wish to preset (VIDEO, VCR 1, VCR 2, PHONO, CD, DAT or TAPE 1), or call up the TUNER preset channel (CH-1 through CH-40) using TUNER numeric keys while the indicator is blinking (about 5 seconds).

Repeat this operation for each additional source to be preset.



3. When the presetting is complete, the display will show preset data in the following order with the indicator blinking rapidly:
VOLUME, BALANCE, LOUDNESS ON → SEA (S.E.A. preset pattern) → PRO LOGIC (MODE, DELAY)
→ DAP (MODE, SIZE, LIVE, WALL)

- When both PRO LOGIC and DAP are on, the display changes to DAP by bypassing PRO LOGIC.
- The blinking indicator changes to a continuously lit state when the display is complete.

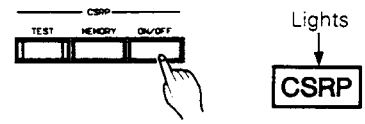
Notes:
- Sound and image output is suppressed while a CSRP test is in progress.
- All other operations are disabled while a CSRP test is in progress.

To exit from this mode, press the CSRP TEST key again.

Note:
Press the MEMORY key again if the indicator stops blinking before you press a SOURCE key or calling up a TUNER preset channel. Sources can be preset regardless of whether the CSRP key is ON or OFF, but when a source is to be preset with the CSRP key OFF, do not turn it ON until the presetting is complete. If the CSRP key were turned ON before the presetting is complete, the current data settings would be recalled to override the presetting in progress. Even with the SEA key ON, the SEA PRESET indicator will blink when the MEMORY key is pressed if an S.E.A. preset pattern has not been previously selected. In this case, select an S.E.A. preset pattern and retry this operation.

— Recalling the CSRP data —

1. When the CSRP key is ON, preset data is recalled each time a SOURCE key or TUNER preset channel is selected.



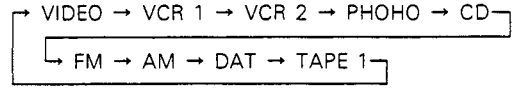
2. The display shows the data setting.
(refer to step 3 of "Presetting the CSRP data")

- Subsequently, a similar display occurs each time an additional source is selected.

Note:
Though data settings as recalled can be changed with control keys as usual, preset data cannot be altered. To alter preset data, perform the operation described in "Presetting the CSRP data."
The settings made with CSRP ON remain in effect even after CSRP turned OFF.

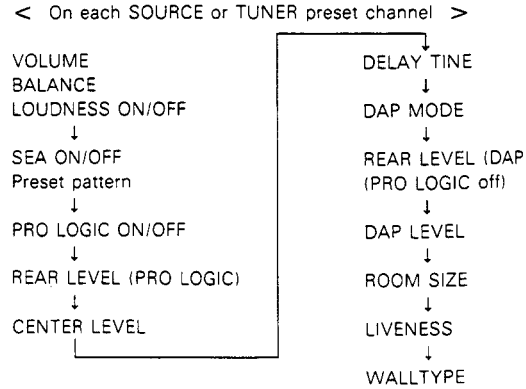
■ CSRP TEST

When the TEST key is pressed, all the CSRP data on all the SOURCE key (except TAPE 2) or TUNER preset channel are displayed in the following order.



For FM and AM, the last selected preset channel is recalled.

< On each SOURCE or TUNER preset channel >



COMPU LINK REMOTE CONTROL SYSTEM

JVC's exclusive "COMPU LINK" remote control system connects equipment with JVC COMPU LINK-1/SYNCHRO terminals to the remote control system. The equipment can be controlled from the remote control unit, or other functions (such as automatic source selection and synchronized recording) can be used.

■ Equipment remote control

JVC Compu Link equipment functions that can be controlled remotely include:

CD player	: PLAY, STOP, AUTO SEARCH, TRACK NO. SELECT
CD auto-changer	: PLAY MODE (CONTINUE, PROGRAM, MAGAZINE PROGRAM), DISC NO. SELECT, TRACK NO. SELECT
Cassette deck	: PLAY, STOP, MUSIC SCAN, DIRECTION, FAST FORWARD, REWIND, PAUSE, RECORD
DAT deck	: PLAY, STOP, AUTO SEARCH, TUNE NO. SELECT, FAST FORWARD, REWIND, PAUSE, RECORD
Turntable	: START, STOP

In addition, JVC's audio-visual equipment (such as VCRs and TVs) can also be controlled remotely. For further details, see the remote control unit description in this instructions.

■ Automatic source selection

Pressing SOURCE keys will automatically put the corresponding source equipment into the PLAY mode. When the PLAY key on source equipment is pressed, the corresponding SOURCE key is automatically set to that source. Other source equipment shuts down about 5 seconds later.

Note:
Automatic source selection does not work on the Tape deck connected to the TAPE 2 terminals.

■ Synchronized recording

Synchronized recording permits a tape deck to start recording automatically in synchronism with a CD player or turntable. Set the tape deck in the REC/PAUSE mode and press the PLAY key on the CD player or turntable. The tape deck will enter the recording mode automatically, starting synchronized recording.
Synchronized recording stops automatically after the CD player or turntable has stopped and the tape deck has entered the REC/MUTE mode for about 4 seconds.

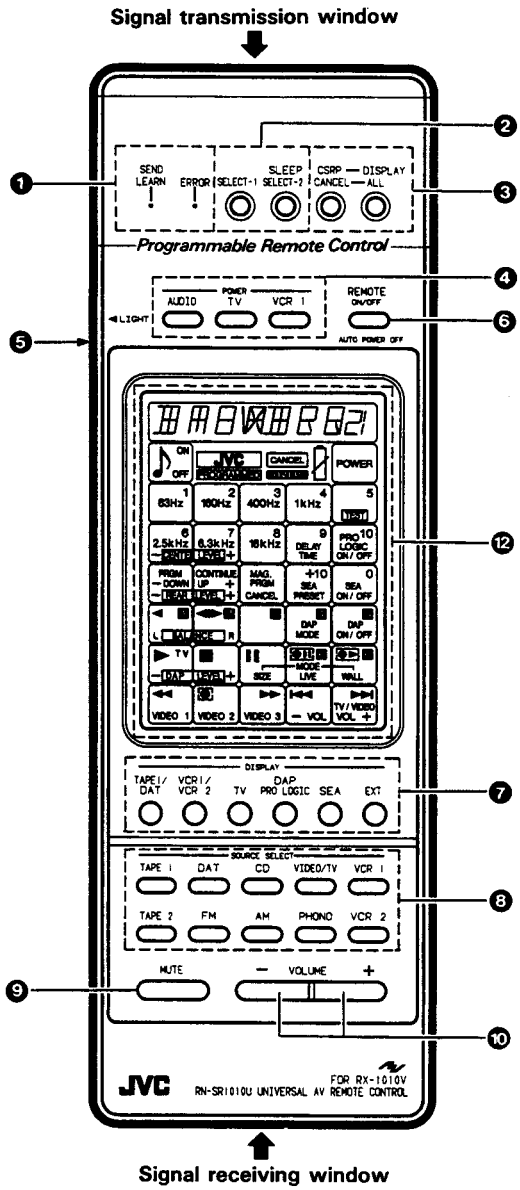
Notes:
- To set the REC/PAUSE mode, press the REC and the PAUSE key at the same time. Synchronized recording is disabled if the PAUSE key is pressed after the REC and the PLAY key are pressed simultaneously. For details, refer to the tape deck instructions.
- If the power for any connected equipment is shut off during synchronized recording, the system will not operate properly. In this case, you must start all over again.
- During synchronized recording the SOURCE key will lock in either the CD or PHONO position. This is to prevent you from accidentally stopping the recording or changing to any other source. To change to another source you must first stop synchronized recording.
- You cannot switch the CSRP ON and OFF during synchronized recording.
- Do not connect the remote cable when the cassette deck is connected to the VCR1, VCR2 and TAPE 2 terminals.
- If you program track numbers on a CD player or CD auto-changer and use synchronized recording, a blank space about 4 seconds long will be left between recordings. This permits music scanning.

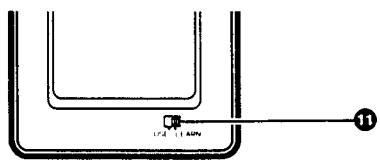
Display examples
When using the remote control unit to operate equipment which has the COMPU LINK-1/SYNCHRO terminals, the name of the source and the operating mode will appear on the display.

Symbol	▶	❚❚	■	◀◀	▶▶	⏮	⏭
Indication							
"REC/PAUSE" mode	DAT/TAPE REC						
During "recording"	DAT/TAPE REC						

REMOTE CONTROL UNIT (RM-SR1010U)

The RM-SR1010U remote control units control the RX-1010VTN and JVC's audio visual gear from a remote place via the Compu Link Remote Control System.
Depending on the function in operation, the RM-SR1010U can also receive and use the signal of another remote control unit.





Rear of the RM-SR1010U

■ NAMES OF PARTS AND THEIR FUNCTIONS

The RM-SR1010U Remote control Unit functions in the following two modes:
***USE mode** : This is normal operation mode for controlling components.
***LEARN mode**: In this mode, the signals from other remote control units can be stored in the memory of the RM-SR1010U and cancelled.

❶ **SEND/LEARN indicator**
USE mode: Act as the SEND indicator and lights up while signals are being transmitted.
LEARN mode: Act as the LEARN indicator and indicates the LEARN operation status.
ERROR indicator
USE mode: This indicator will not light.
LEARN mode: Act as the error indicator and indicates an operation error. During programming it lights together with the SEND/LEARN indicator.

❷ **SELECT-1**
USE mode: Use to select the CD changer mode source display screen pattern.
LEARN mode: Use to select the programmed mode source display screen pattern. (VCR 1, VCR 2, TV, CD, DAT)
SLEEP/SELECT-2
USE mode: Use to set the sleep timer.
LEARN mode: Use to store the functions of other remote control into the buttons of the RM-SR1010U in addition to LCD panel keys.

❸ **CSRP/CANCEL**
USE mode: Use to turn CSRP ON or OFF.
LEARN mode: Use to clear (cancel) the functions which have been stored previously.
DISPLAY/ALL
USE mode: Use to display the CSRP data on the display of RX-1010VTN.
LEARN mode: Use to cancel all the functions stored for one screen.

❹ **POWER**
AUDIO: Press to change the power for the RX-1010VTN to ON or STANDBY.
TV: Press to turn on or off the power to JVC's TV receiver.
VCR1: Press to turn on or off the power to JVC's VCR.

❺ **LIGHT**
While this button is pressed, the LCD panel will be illuminated.

❻ **REMOTE ON/OFF**
Press to turn the remote control unit ON or OFF.
When no further entry is made one hour after the last operation. The remote control unit will be automatically turned OFF.

❼ **DISPLAY**
Press to change the LCD panel display to the corresponding mode. Pressing these buttons does not change the source selected for input to the RX-1010VTN.

❽ **SOURCE SELECT**
Press to change the source selected for input to the RX-1010VTN.

❾ **MUTE**
Press to mute the output sound level.

❿ **VOLUME (−, +)**
Press to adjust the output sound level.

⓫ **USE/LEARN select switch**
Use to select the operation mode USE or LEARN.

⑫ LCD panel

Mode display

Display the names of components which can be controled.

JVC : This indication appears when the keys displayed on the LCD panel corresponds to a JVC A/V components.

PROGRAMMED

USE mode : Appears when the key functions of another remote control unit have been stored into keys displayed on the LCD panel.

LEARN mode : Appears when the RM-SR1010U is ready to store signals.

Battery indicator ( )

Appears when the batteries are nearly exausted.

Replace the batteries in the RM-SR1010U with the new one.

OVER : Appears when the memory is full, and no more signals can be stored.

CANCEL : Indicate the cancel (clear) operation status.

ON OFF : Press this key to turn the buzzer ON or OFF. Even when this key is set to OFF, the buzzer will sound when a stored key function is cancelled, or when the USE/LEARN switch is changed over.

Operation keys

Operation keys which can be used in the mode currently selected are shown on the LCD display.

■ Batteries

The RM-SR1010U remote control units require six batteries SIZE AAA/AM-4/LR03 (1.5V).

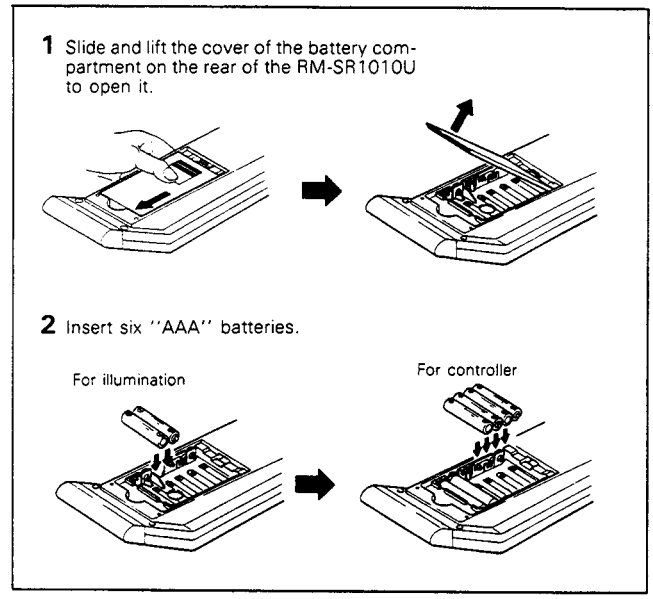
Battery replacement

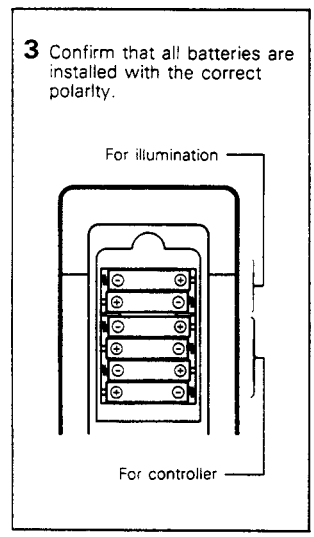
- With the batteries are nearly exhausted the " " (battery mark) appears on the LCD panel. When you see this, replace all the batteries with the new ones as soon as possible.
- When replacing the batteries, be sure to set the USE/LEARN switch located on the rear panel of the RM-SR1010U, to the USE position.
- With the RM-SR1010U, do not allow more than 3 minutes for battery replacement to preserve stored data.

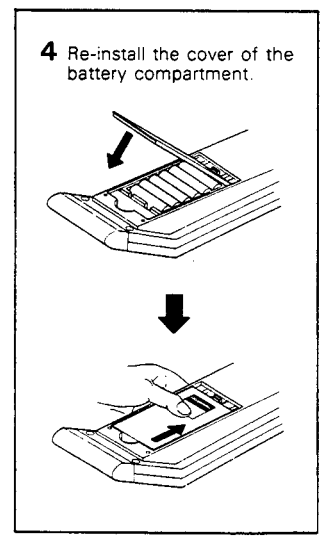
Cautions on batteries

- Use long-life "AAA" (1.5V) batteries.
- Observe the polarity of batteries when loading them.
- Do not mix new and old batteries.
- Be sure to use batteries of the same brand. Batteries may vary in voltage even though they look alike.
- If the remote control unit will not be used for a long time, remove the batteries.
- Do not heat batteries or attempt to dispose of them by burning.

How to install batteries


1 Slide and lift the cover of the battery compartment on the rear of the RM-SR1010U to open it.
2 Insert six "AAA" batteries.
For illumination
For controller

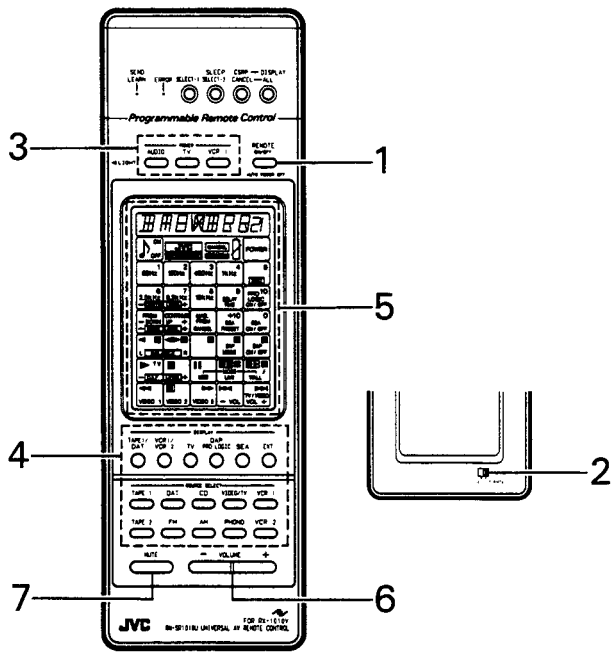




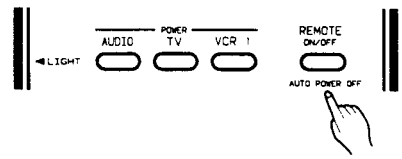
OPERATION WITH THE REMOTE CONTROL UNIT (RM-SR1010U)

- Check for connection of the COMPU LINK-1/SYNCHRO terminals on the remote equipment by a remote cable.
- Switch on the power to all the equipment required before starting operation. The POWER key on the RM-SR1010U can switch on the power to the AUDIO (RX-1010VTN). TV. VCR.
- Direct the transmitter window of the remote control unit at target equipment within a distance of 7 meters. Take care to avoid obstacles between the transmitter and the target. Press keys slowly and positively, making sure the desired functions result.
- The operation of each key on the remote control unit is crearly displayed on the RX-1010VTN. For specific procedures, refer to the instructions for the particular equipment.
- Since the RM-SR1010U has an auto power-OFF function, when any key or button on the RM-SR1010U is not operated for a period of about one hour, the LCD panel display will be automatically turned OFF. However, it is recommended that you press the REMOTE ON/OFF button to OFF after operations are finished, to prevent the batteries from becoming exhausted prematurely.

■ Basic Operation

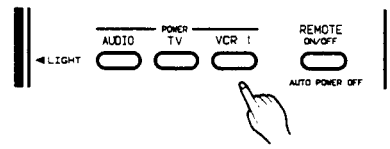


1. Turn the RM-SR1010U to ON using the REMOTE ON/OFF key.

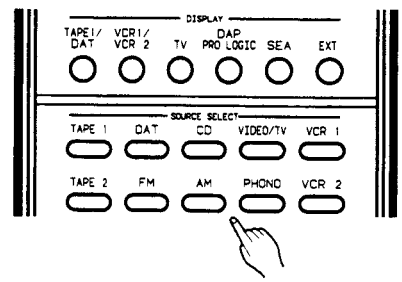


2. Set the USE/LEARN switch on the rear panel of the RM-SR1010U to the USE position.

3. Using the POWER buttons on the RM-SR1010U to turn the power to each component ON.



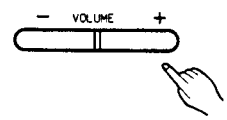
4. Select the screen of the source component to be operated with the SOURCE SELECT buttons or DISPLAY buttons.



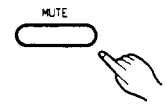
When the required screen has been selected with one of the DISPLAY buttons, the source input to the RX-1010VTN will not changed.

5. Using the keys on the LCD panel or buttons on the RM-SR1010U operate the component as desired.

6. Adjust the VOLUME keys your taste.

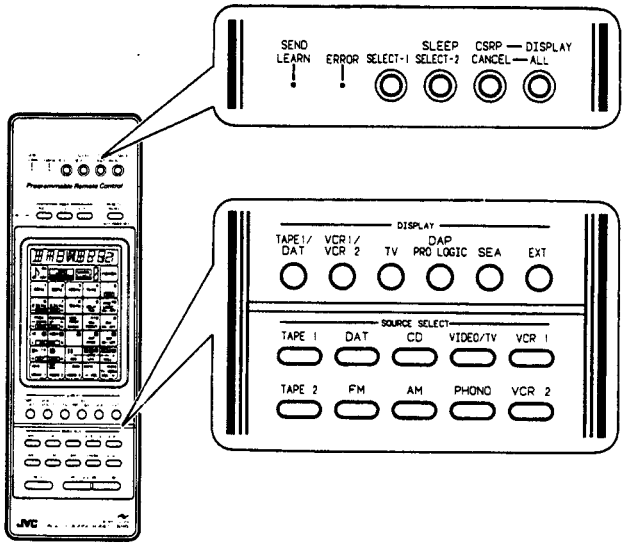


7. Press the MUTE key as needed.



- Press again to OFF or operate the VOLUME key, to turn ON the sound again.

Using the Standard Mode Screens

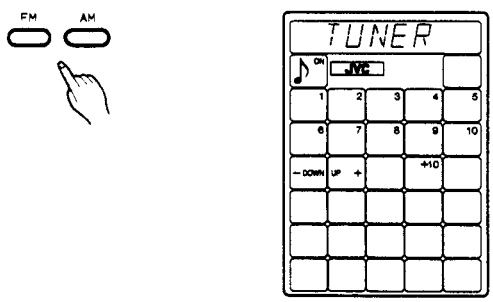


The screen patterns with the JVC indication are provided exclusively for the operation of JVC A/V components.
As the remote control operation signals for JVC components have been stored into these keys, the key functions on these screens can be used without performing programming.
To store other functions in addition to the previously stored key functions, refer ro "How to performing programming" on page 29.

- Some key indications may not correspond to the name on the components. Check any differences between them carefully before use.
- For details of operations, refer to the instruction book of each compoenent.

Listening to FM/AM Broadcasts

When the FM or AM button is pressed, this screen Pattern appears.

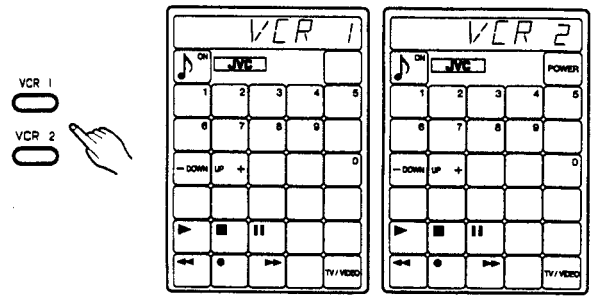


1 – 10, +10 : Selects the preset channel.
– DOWN : Scans to lower preset channels.
UP + : Scans to higher preset channels.

You cannot tune in stations other than presets.
For reference, see page 10.

Using a VCR (1 or 2)

- When the VCR 1 or VCR 2 button is pressed, these screens pattern appear.

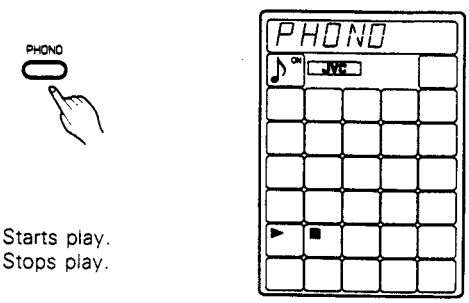


1 – 9, 0 : Select the VCR channel directly.
–DOWN : Scans to lower VCR channels.
UP+ : Scans to higher VCR channels.
TV/VIDEO : Switches the RF signal path to the TV or VIDEO position.
▶ : Starts play back a video tape.
■ : Stops VCR operation.
❚❚ : Stops recording/playback temporarily and enters the pause/still mode. To release it press "▶"
◀◀ : Rewinds video tape.
▶▶ : Fast-forwards video tape.
● : Press together with "▶" to starts recording. Press together with "❚❚" to enter the record-standby mode.
POWER : Turns the power the VCR ON/OFF. (VCR2 only)

- The source input to the RX-1010VTN does not change when the VCR1 or VCR2 screen pattern has been selected with the VCR1/VCR2 (DISPLAY) button.
- Use the VCR1/VCR2 (DISPLAY) button when you do not want input sources to be changed, as when VCR1 (2) held standby while viewing VCR2 (1).
- The screen pattern toggles between VCR1 and VCR2 each time the VCR1/VCR2 (DISPLAY) button is pressed.
- Some JVC VCRs provide two types of remote control signals (A/B mode selectable). With these VCRs, "A" mode corresponds to the VCR1 screen, and "B" mode corresponds to the VCR2 screen on the RM-SR1010U. For details, refer to the Instruction Book of the VCR.

Listening to Records

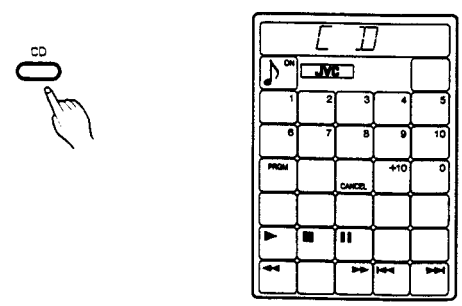
When the PHONO button is pressed, this screen pattern appears.



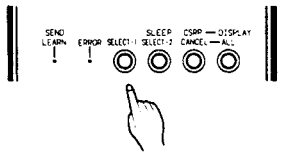
▶ : Starts play.
■ : Stops play.

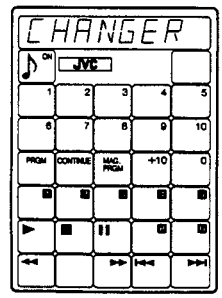
Listening to CDs (CD Player or CD changer)

When CD button is pressed, this screen pattern appears.



To operate the CD changer, first press the CD button to call the CD screen, then press the SELECT1 button to switch to the CHANGER screen.
Press the SELECT1 button again to return to the CD screen.

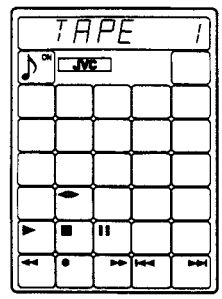




CANCEL : Releases programming. (for a CD only)
1 – 10, +10, 0 : Selects the track number.
PRGM : Used to enter the program mode. (for a CD only)
▶ : Starts play.
■ : Stops operation.
❚❚ : Stops play temporarily. To release press "▶".
◀◀ : Moves backward quickly during play.
▶▶ : Moves forward quickly during play.
⏮ : Skips to the beginning of the previous track.
⏭ : Skips to the beginning of the next track.
(The follwing keys are for a CD CHANGER only)
1 – 6, P : Selects the disc number.
CONTINUE : Used for contenious play.
MAG.PRGM : Used for magazine program play.
PRGM : Used for program play.

Using a Cassette Deck

When TAPE1 button is pressed, this screen pattern appears.

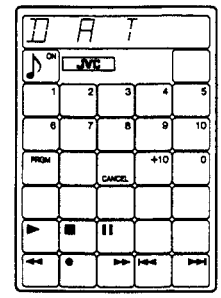


◀❚▶ : Changes the tape running direction.
▶ : Starts playback.
■ : Stops operation.
❚❚ : Stops recording/playback play temporarily. To release press "▶".
◀◀ : Fast-winds the tape from right to left.
▶▶ : Fast-winds the tape from left to right.
⏮ : Skips to the beginning of the previous tune.
⏭ : Skips to the beginning of the next tune.
● : Press together with "▶" to start recording. Press together with "❚❚" to enter record-pause mode.

When the TAPE2 is pressed, the source input to the RX-1010VTN is swiched to TAPE2, but the screen pattern for the remote controller does not change. Operate TAPE2 directly from the equipment connected to the TAPE2 terminals.

Listening to DAT

When DAT button is pressed, this screen pattern appears.

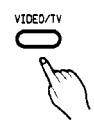


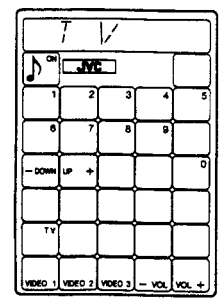
CANCEL : Releases programming.
1 – 10, +10, 0 : Selects the tune number.
PRGM : Used to enter the program playback mode.
▶ : Starts playback.
■ : Stops operation.
❚❚ : Stops recording/playback temporarily. To release press "▶".
◀◀ : Rewinds the tape.
▶▶ : Fast-forwards the tape.
⏮ : Skips to the beginning of the previous tune.
⏭ : Skips to the beginning of the next tune.
● : Press together with "▶" to start recording. Press together with "❚❚" to enter record-pause mode.

Though either the TAPE1 or DAT screen pattern can be directly called using the TAPE1/DAT button, the source input to the RX-1010VTN does not change. Use the TAPE1/DAT button when you do not want input sources to be changed, as when TAPE2 is being played back, TAPE1 is being rewound, either tape is held standby and so on.
The screen pattern toggles between TAPE1 and DAT each time the TAPE1/DAT button is pressed.

Watching a TV

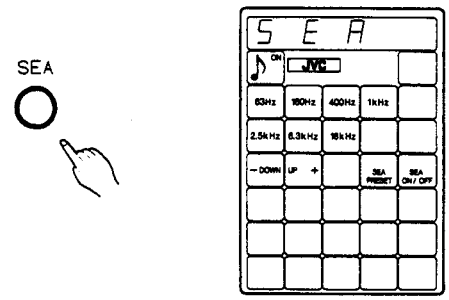
When VIDEO/TV button is pressed, this screen pattern appears.





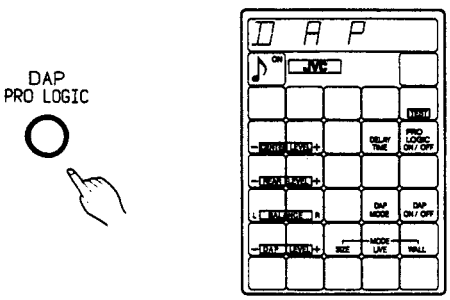
1 – 9, 0 : Selects the TV channel.
–DOWN : Scans to lower TV channels.
UP+ : Scans to higher TV channels.
TV : Selects the TV and VIDEO mode.
VIDEO 1 – 3 : Selects the video input of video components connected to the TV.
–VOL : Decrease the sound volume of the TV receiver.
VOL+ : Increase the sound volume of the TV receiver.

Using the S.E.A. graphic equalizer
When SEA button is pressed, this screen pattern appears.



63 Hz—16kHz: Select the frequency band required to be compensated.
–DOWN, UP+: Adjust the amount of compensation of the selected frequency band.
SEA PRESET: Select the desired S.E.A. preset equalization pattern.
SEA ON/OFF: Turn the S.E.A. feature ON or OFF
for reference, see page 12.

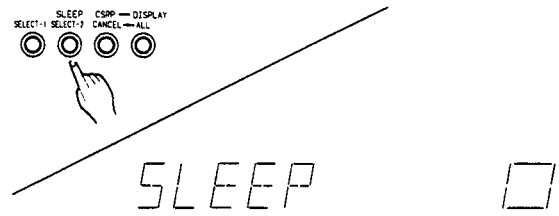
Using the Dolby Surround Pro Logic or DAP sound effect.
When DAP, PRO LOGIC button is pressed, this screen pattern appears.



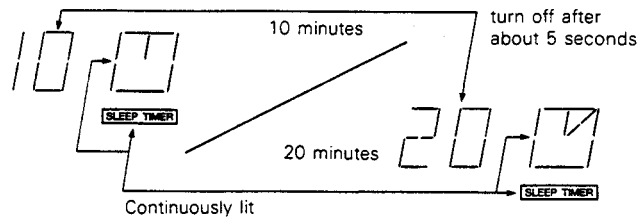
PRO LOGIC ON/OFF: Turns the Dolby Pro Logic surround sound effect ON/OFF.
DELAY TIME : Sets the delay time of the rear channels.
TEST : Turns the test tone ON/OFF.
– CENTER LEVEL + : Sets the output level of the center speakers.
– REAR LEVEL + : Sets the output level of the rear speakers.
L BALANCE R : Adjust the volume balance between left and right speaker.
DAP ON/OFF : Turn the DAP ON or OFF.
DAP MODE : Selects the DAP mode.
SIZE : Sets the desired sound-field size.
LIVE : Adjust the depth of resonance.
WALL : Adjust the walls materials of simulated room.
– DAP LEVEL + : Adjust the DAP effect to be mixed with the normal stereo sound.

Using the Sleep Timer
The sleep timer shuts off the RX-1010VTN (to enter the STANDBY mode) when the preset time intervals have elapsed.

1. Press the SLEEP TIMER (SLEEP) button to set the timer setting mode.



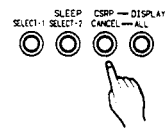
2. Each time the SLEEP TIMER (SLEEP) button pressed subsequently, the timer can be set up to 80 minutes, in 10-minute multiples.



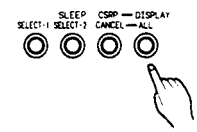
3. The remaining reset time is shown in the RX-1010VTN display.

Remaining time: 30 min.

Using CSRP feature
- Press CSRP, Button to turn CSRP ON or OFF.



- Press DISPLAY button to recall CSRP data stored on a source being played.



For details, refer to "RUNNING THE CSRP FEATURE" on page 20.

Using the PROGRAMED Mode Screens

In the LEARN mode, this remote control unit (RM-SR1010U) can be programmed to memorize functions of other remote control unit.
It allows you to control the existing audio, video, and other remote controllable equipment directly from the RM-SR1010U.

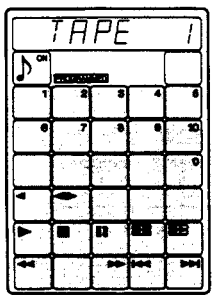
- Besides LCD panel keys it's possible to program on TV (POWER), VCR1 (POWER and Source), VIDEO/TV, VCR2 buttons.

Learned functions can be stored on the PROGRAMMED mode screen patterns shown below. Use to check whether or not the key function is different from the key indication on the screen and for any notes.

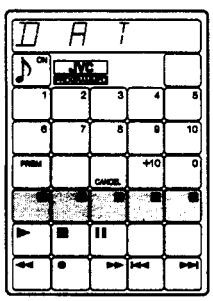
- Only one screen at each source can be programmed.

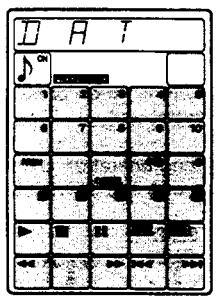
Use the SELECT-1 button to change screen patterns from each separate source.

for **TAPE 1**

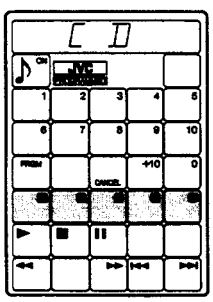


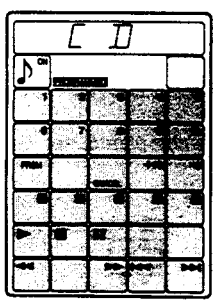
for **DAT**

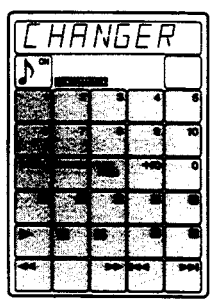




for **CD**

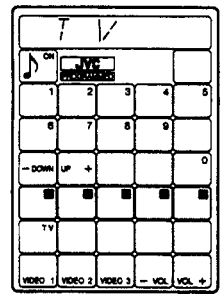


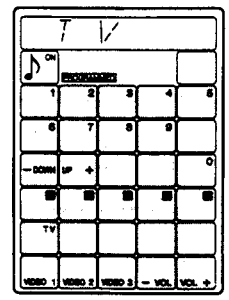




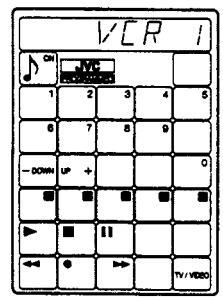
- You cannot select the CHANGER screen in the LEARN mode unless you have selected it in the USE mode.

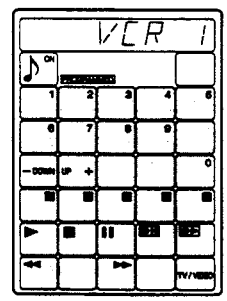
for **VIDEO/TV**



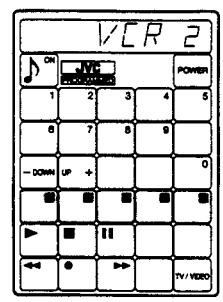


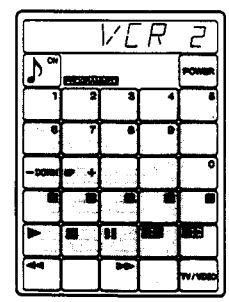
for **VCR 1**



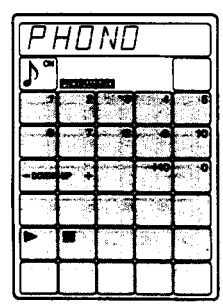


for **VCR 2**

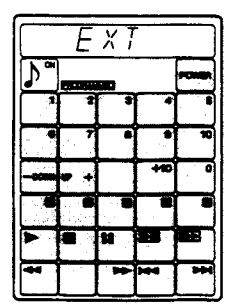




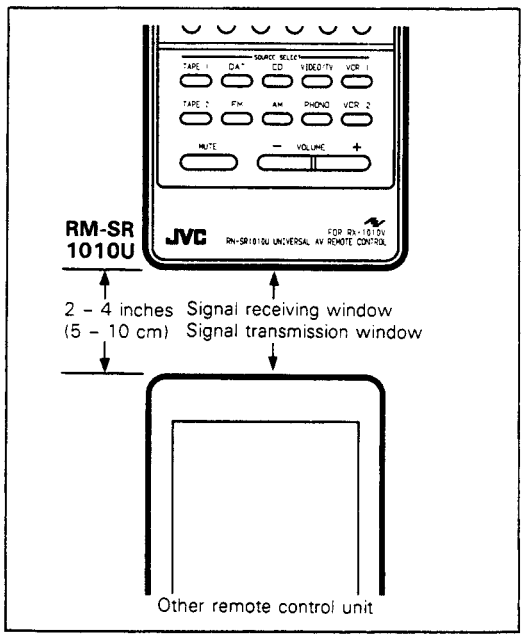
for **PHONO**



for **EXT**



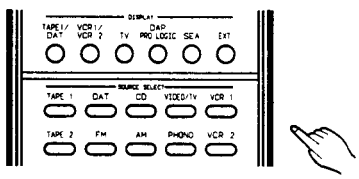
■ How to perform programming (learning)



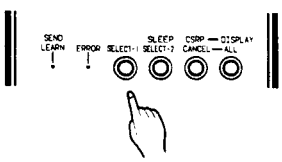
— Programming into the Keys on the LCD Panel —

1. Set the USE/LEARN switch on the rear panel of the RM-SR1010U to the LEARN position.

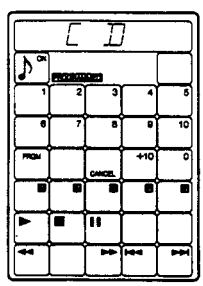
2. Select the source required to be memorized with any of the SOURCE SELECT buttons or DISPLAY buttons.



3. Select the required screen to be memorized wit the SELECT-1 button.



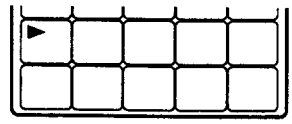
The screen is changed according to the source selected, and the keys which have not been programmed will blink.



When only one screen is available for the LEARN mode depending on the source selected, the screen will not be changed. When programming has already been done for the source selected, the screen will not be changed unless all memorized data is cancelled. (See, "How to cancel programmed signals")

4. Place both remote control units, as Fig. 00 showing, on a flat surface.

5. Select the key to be memorized among the ones that are blinking, and press it once then release it.

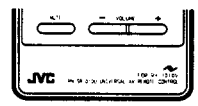


Only the key pressed remains, with all other keys being erased.

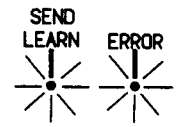
Start blinking

When a key in which programming is impossible or which has already been programmed is pressed, the ERROR indicator will light. In such a case, press a key in which programming is possible. When the key is pressed by mistake, wait for about 7 seconds and the keys will start blinking again, when retry from the beginning.
When the SEND/LEARN indicator stops blinking before you proceed to the next step, perform the above operation again.

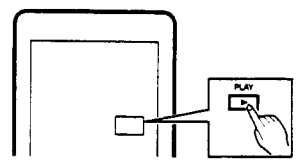
6. While the SEND/LEARN indicator is blinking (within about 7 seconds), press the key (button) of another remote control unit to be memorized and keep it pressed.



RM-SR1010U



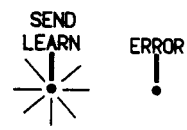
light continuously (during programming)



Other remote control unit

- While indicators are lit, keep pressing the key (button) of the other remote control unit.

7. When the memorizing operation is completed, the ERROR indicator goes out and only the SEND/LEARN indicator remains lit.



If only the ERROR indicator lights, the memorizing operation has not been performed correctly.
Repeat the programming procedures again.

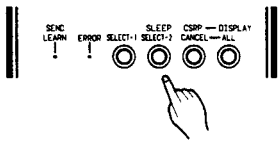
8. After programming is completed, set the USE/LEARN switch to the USE position.

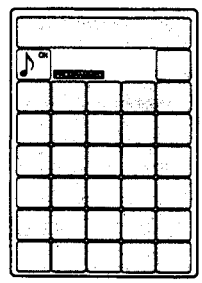
— Programming into Buttons on the RM-SR1010U —

Other than the keys appearing on the LCD panel, the POWER (TV, VCR 1), SOURCE SELECT (VCR 1, VCR 2, VIDEO/TV) buttons on the RM-SR1010U can also memorize signals from other remote control units. To program these, perform the following:

1. Set the USE/LEARN switch on the rear panel of the RM-SR1010U to the LEARN position.

2. Press the SELECT 2 button.





The component modes and key indications, etc. on the LCD display go out.

- When this button is pressed again, it is possible to program the keys in the LCD panel. See page 29.

3. Select the button which you want to program. Press it, then release it.

When a button which cannot be programmed or which has already been programmed is pressed, the ERROR indicator lights. In this case, select another programmable button.
If a button is pressed by mistake, or the SEND/LEARN indicator stops blinking before you proceed to the next step, perform this operation again.

4. Subsequent procedures are the same as in —Programming into the keys on the LCD panel —. See page 29.

- The SOURCE SELECT (VCR1, VCR2, VIDEO/TV) buttons can select sources for the RX-1010VTN even aftr programming. For example, if the VCR1 (SOURCE SELECT) button is pressed by setting the RM-SR1010U in the USE mode after the VCR play function for another remote controller has been programmed in that button, the source input to the RX-1010VTN will change to VCR1, then VCR1 will start playing.

IMPORTANT

- The RM-SR1010U can memorize remote control signals from most infrared remote control units of other makes. However, if the other remote control uses specially coded signals or signals with codes with a longer period, programming may be impossible. In this cases, even if the programming procedures are performed several times repeatedly, it will be impossible to store the codes in memory.
- Some remote control transmit a number of instructions simultaneously (when programming the timer of a TV/VCR, for example); in such a case, the RM-SR1010U may not operate correctly.
- Even when the programming operation has been performed without any problem, the key may not operate or subsequent operation may not be possible. This is because some components may not accept remote control signals which are slightly different from the original ones.
  If this happens, cancel the previously stored signals then perform the programming operation again. (To cancel the stored signal, refer to "How to cancel programmed signals" on page 00.)
- Some programmable screens have a " [SHIFT] " or " [2ND] " key indication. The functions of other remote control units can be programmed into each key in the normal way. However, in the USE mode, the LCD panel will show that the " [ ] " key should be used together with the " [SHIFT] " key or " [2ND] " key so that two-step functions such as REC/PAUSE (record standby) or REC/PLAY (recording start) can be performed, to prevent misoperation.
- To operation of the REC, REC/PLAY or REC/PAUSE keys (buttons) related to recording are different for each remote control unit. Use the keys on the RM-SR1010U taking this into consideration.

- To program the functions of another remote control requiring two keys are pressed in sequence, the function may differ with the order in which the keys are pressed.
  In this case, confirm the order in which they should be pressed before starting programming.

When storing a new function into a key (buttons) in which programming has been done, first cancel the previously stored data, and then perform the programming procedure again. See page 31. "How to cancel programmed signals"

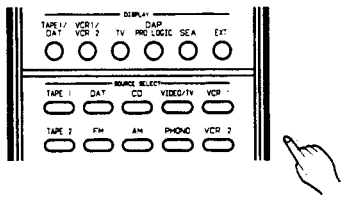
■ How to cancel programmed signals

There are two methods to cancel key functions which have already been stored, cancelling a single key function (**DELETE**), and cancelling all the key functions for one screen (**CLEAR**).

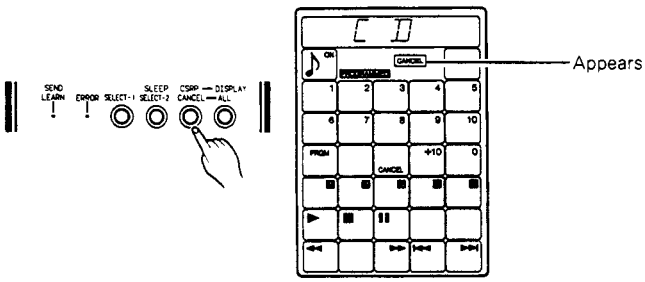
— Cancelling the functions stored in the keys on the LCD panel —

1. Set the USE/LEARN switch on the rear panel of the RM-SR1010U to the LEARN position.

2. Select the source a key function of which is to be cancelled using the SOURCE SELECT buttons or DISPLAY buttons.



3. Press the CSRP/CANCEL button, then release it.

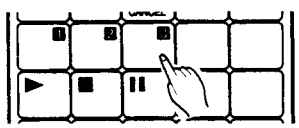


This button does not function if no key have been programmed for the screen. (When this button is pressed again, the RM-SR1010U enters the programming mode.)

4.

To DELETE

While the CANCEL indicator is shown (for about 7 seconds), press the key to be deleted.

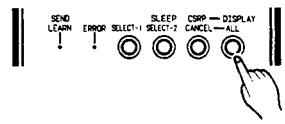


i) Hold the key depressed until the buzzer sounds once.
(Deleting operation starts)
ii) The key to be deleted goes out with next buzzer.
iii) CANCEL indicator goes out.
(Deleting operation is completed)

- The RM-SR1010U enters the programming mode.

To CLEAR

While the CANCEL indicator is shown (for about 7 seconds), press the DISPLAY/ALL button.



i) Hold the key depressed until the buzzer sounds once.
(Clearing operation starts)
ii) Programmed keys go out ringing buzzers one by one.
iii) When all the keys went out, the buzzer sound three times.
iv) CANCEL indicator goes out.
(CLearing operation is completed)

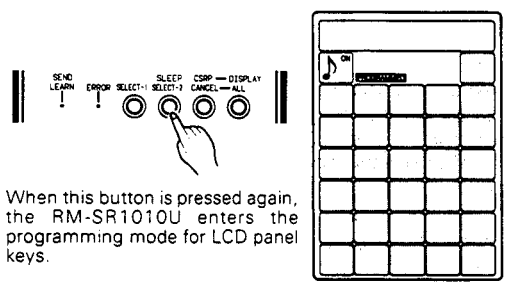
- The RM-SR1010U enters the programming mode.

5. After cancelling is complete, set the USE/LEARN switch to the USE position.

— Cancelling the functions stored in the buttons on the RM-SR1010U —

1. Set the USE/LEARN switch on the rear panel of the RM-SR1010U to the LEARN position.

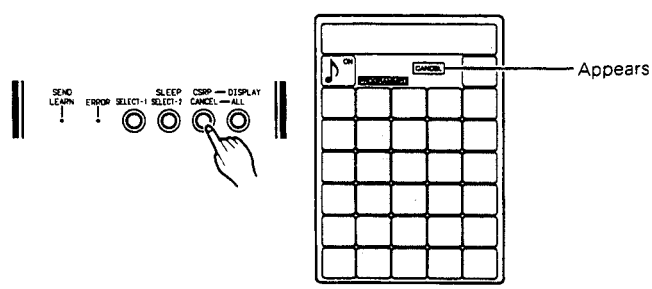
2. Press the SELECT 2 button.



When this button is pressed again, the RM-SR1010U enters the programming mode for LCD panel keys.

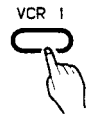
The component modes and key indications, etc. on the LCD display go out.

3. Press the CSRP/CANCEL button, then release it.



4.
To DELETE

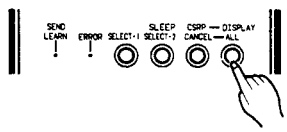
While the CANCEL indicator is shown (for about 7 seconds), press the button to be deleted.



Hold the button depressed until the buzzer sounds once.
(Deleting operation starts)
When deleting is completed, CANCEL indicator go out.

To CLEAR

While the CANCEL indicator is shown (for about 7 seconds), press the DISPLAY/ALL button.



Hold the button depressed until the buzzer sounds once.
When clearing is completed, the buzzer sounds three times and CANCEL indicator go out.

- The RM-SR1010U enters programming mode.

5. After cancelling is completed, set the USE/LEARN switch to the USE mode.

- To prevent mistakes when cancelling functions, check the screen and keys or buttons carefully.
  Especially, since the all-keys or all-buttons clearing operation cannot be stopped once it has started, be especially careful.
- After the signals with which the buttons of the RM-SR1010U have been programmed are cancelled, the buttons will return to their original functions.

Notes:
- NEVER REMOVE THE BATTERIES while a canceling operation is in progress (with the [CANCEL] indicator on).
  If normal operation is not possible even when, having removed the batteries by mistake, they have been reinstalled, remove the batteries and leave the RM-SR1010U for about 12 hours. In this case, normal operation will be restored but all the stored data will be cancelled and you will have to perform programming operations again.
- The canceling operation starts when buzzer sounds once. However, when specially coded signals or many key functions have been programmed, it may take from 5 to 10 seconds to cancel a single key (or button) function. Wait until the complete cancelling operation finishes.

TROUBLESHOOTING

What appears to be a malfunction is not always serious. First be sure to check basic adjustments.

<RM-SR1010U>

The remote control unit does not operate or a component does not operate using the remote control unit.
- Is the polarity of the batteries correct?
- Is the voltage of the batteries sufficient?
- Are there any obstacles to the remote control light sensor.
- Are the buttons and keys correctly and firmly pressed?
- Is being transmitted in the right direction?
  — Aim at the RX-1010VTN when opening the COMPU LINK components connected with remote cable and for other components, aim at the target component and transmit.

Unable to program.
- Is the operation procedure correct?
- Is programming being attempted on modes other than "TAPE1", "DAT", "CD", "VIDEO/TV" VCR1 "VCR2", "PHONO", and "EXT"?
- Are the settings of this unit (RM-SR1010U) and other remote controls correct?
  — Programming may not be correctly executed if placed closer than 2 to 4 inches or if too far away.

<RX-1010VTN>

No sound and no illumination.
Is the AC plug connected properly?
No sound from the speakers.
Are the speaker cords connected?
Are the SPEAKERS keys pressed?
Sound from one speaker only.
Are both speaker cords connected?
Is the BALANCE control set to one extreme or the other?
Continuous hiss or buzzing during FM reception.
The incoming signal may be to weak.
Use the correct antenna.
Occasional crackling noise during FM reception.
This may be automobile ignition noise. Move the antenna as far away from the road as possible.
Loud hum during record playing.
Is the turntable grounded?
Try to change the cord path.
Howling during record playing.
Is the turntable too close to a speaker?